Australian Official RADIO SERVICE MANUAL

Vol. 4

Circuit Dook of Standard

1940/84 Receivers

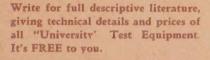


ARTHUR VEONATORKR 4117034



The "University" Voltohmeter

A small sized set checker which is available either in kit form ready to build yourself, or completely built and calibrated ready for instant use. Ideal for the serviceman and experimenter, this instrument has voltage ranges of 0-10, 0-59, 0-250, 0-1800 and ohms 0-500 and 0-50,000. An instrument to suit your purpose and your pocket.



"University" New Senior D.C. and A.C.-D.C. Multimeters

Iwo remarkable instruments, available for either D.C. or A.C.-D.C. measurements, together with output meter ranges. Detachable lid makes this instrument ideally suitable for bench or outdoor use. Also available in kit form ready to build yourself. Write for full details.



LABORATORY BUILT TEST GEAR *

Precision Engineered by

RADIO EQUIPMENT PTY. LTD.

E.S. & A. BANK BLDGS. (Opp. Grace Bros.), BROADWAY, N.S.W. M 6391, M 6392. Telegrams: "RAQUIP" Sydney

Foreword . . .

In this, the fourth annual edition of the Australian Official Radio Service Manual an attempt has been made to cover both 1940 and 1941 National Receiver Circuits. Owing to war-time restrictions on tooling-up for new models, the changes in 1941 circuits are, generally, not of a major character.

As it is not anticipated that there will be any radical changes in receiver design during the war, this volume of the Australian Official Radio Service Manual will be the last until such times as circuit alterations to Australian receivers are such as to warrant a further issue.

With this edition, the complete range of circuits from 1937 to 1941 inclusive is available to radio servicemen and dealers. Limited quantities of previous issues are available and may be secured from your wholesaler, bookseller, or the publishers.

This book provides a unique service in Australia in that it represents the sole and only means whereby servicemen can secure each year's national receiver circuits within the covers of one volume. The remarkably fine reception which was given the three preceding volumes indicates that these served a most useful purpose, and in thanking our many supporters for their confidence, we desire to express our appreciation of the assistance given us by the manufacturers of Australia's National Receivers, whose co-operation makes the publication of this book possible.

THE STRAND PRESS PTY. LTD.

Dunstan House 236-238 Elizabeth Street BRISBANE



Model 772-20,000 Ohms-per-Volt Super Sensitive Weston Analyser

The Reliability and Accuracy of WESTON Instruments ensure Dependable Service

WESTON Instruments are the result of half a century of experience and untiring research, and embody the utmost in accuracy and value.

Model 772, featured above, is the only instrument which has 4½in. meter with full size movement... sensitivity which allows reading as low as 50 microamps, on full scale deflection... wide open scale with 100 divisions and knife-edge pointer. It gives resistance readings and measurements of DEPENDABLE ACCURACY... over an extremely wide range.

MODEL 697 VOLT-OHM-MILLIAMMETER—a pocket size instrument—has the following ranges: Voltage A.C. and D.C. 0-7.5, 0-15, 0-150, 0-750. Current D.C. 0-7.5 and 75 milliamperes. Resistance—5,000-500,000 ohms, 35-3,500 ohms centre scale.

MODEL 776 TEST OSCILLATOR—for A.C. supply 110-250V 42-60 cycle. This instrument has frequency ranges from 50 KC to 33 MC accuracy within ½ of 1 per cent. on broadcast bands, 1 per cent. on short wave.

MODEL 695 POWER LEVEL METER—is a rectifier type voltmeter reading in decibels as well as volts. Ideal for power level measurements in all types of speech equipment.

For years of trouble-free service—choose Weston Instruments. Phone or write for particulars.

Distributors

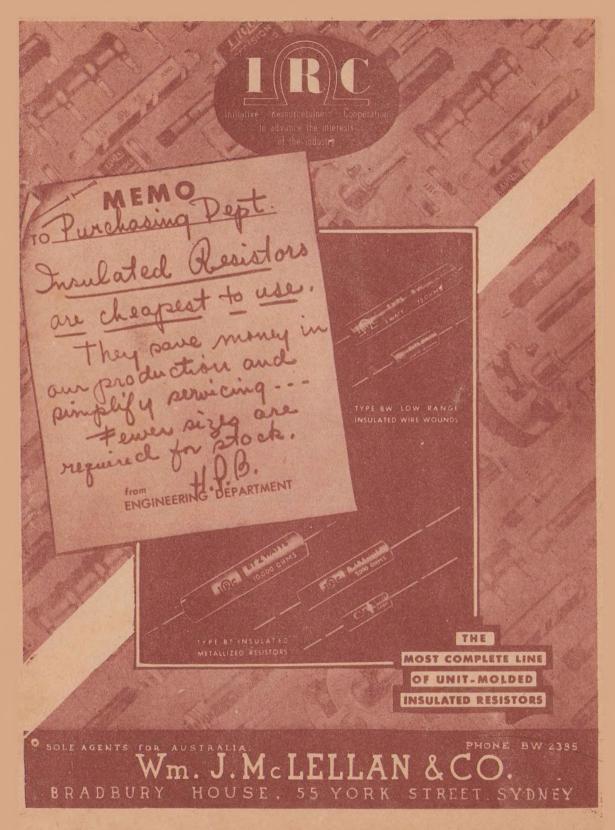
WARBURTON FRANKI LTD.

307-15 KENT STREET, SYDNEY
380-2 BOURKE STREET, MELBOURNE 233-6 ELIZABETH STREET, BRISBANE

Contents Vol. 4

Circuits and Data, Australian Standard 1940/41 Radio Receivers

	16 Mo	narch						220
Astor	43 Nat	ional	4.					226
	50 Phi	lco						228
		er Pan					/	235
	75 Pea	1						240
	76	THE REAL PROPERTY.						257
	81							277
Genalex	7.1	omberg-Ca						280
Gulbransen 12	20							
Healing 1.	43	.C						293
His Master's Voice 1	"							306
Hotpoint Bandmaster 1		imate					100	316
Kriesler		ldon						323
Mullard 20	07 We	estinghouse						327
		7 700						
Conversion Tables 1	57 Me	moranda				239.	256,	315
		dio Symbol						
Adver	tising	Index	X					
Amalgamated Wireless Valve Co. Ltd.	14 Ele	ectrical &	Radio	Wor	rld			206
		Lelland, V						8
Bloch and Gerber Ltd		ilips Electi						10
		dio Equip						4
		rburton F						6.
	14 Wa	rburton r	Tallki	Little.				U.
	74 Wa	rburton F	ranki	Lita.				



How to Get Maximum Service from the Manual

If you turn to the many pages of circuits and their essential characteristics you will notice many schematic drawings of the circuits employed by various manufacturers in many different models. In most cases you will find that voltages and current flow at vital points in the circuit are given, thus enabling the serviceman with his equipment to check up his set against a set which has just left the production line, and when he finds the point where the set he is servicing differs widely in its readings from those the manufacturer lays down he begins to check up that particular circuit and soon finds the fault, which may be in a valve, a resistor, a condenser, a coil or a transformer. In some cases where this information is not given you will find other information such as resistance measurements and component values that will be almost as useful.

In the case of each receiver circuit you will find a list of components with the diagram code letter and number for each component with that component's value beside it: while in the case of other circuits the symbol for each component has the value clearly marked beside it so as there can be no doubt that the serviceman will know just what capacity each condenser should have or what ohmic resistance each resistor should have.

Perhaps some servicemen will wonder why we have not printed photographs of the completed chassis or under chassis diagrams. The reason is that we deem them unnecessary even if space happened to be available, for you as the serviceman or dealer have the defective chassis in front of you, you can see the whole top of chassis layout and identify each component a valve, and then when you turn the chassis over you have the actual component array and chassis wiring before you ready to be translated to the diagram instead of the slower way of schematic diagram to under chassis diagram and then to the actual chassis.

In reading the diagram into the actual wiring of the receiver we suggest you first

use your experience to diagnose the trouble and then check the particular suspected circuit at that stage against the diagram and voltage current, and component values given in the Manual. If your diagnosis proves incorrect, then check your chassis stage by stage against the circuit diagram and the data given with that particular circuit.

Of course it is not our intention to suggest that you alter present method of servicing, such as checking valves as the first step, testing the audio amplifier as a second step and so on, but remember we are trying to help someone less experienced than yourself, in fact our ideal way of testing a receiver is to form some opinion as to what is wrong first of all, then check the valves, replacing defective and doubtful ones, and if in our opinion valves are the trouble to try the set, but if this is not the fault systematically test each condenser, resistor and coil one by one and stage by stage, and it is here that the Manual is of such great value to all who are servicing a radio set, as the value of each and every component and the circuit associated with it is known.

If you are called upon to service any particular brand and model of radio receiver check over the circuit, component values and valves used before you get to the job or open up the chassis, for being acquainted with the design of the set you are about to service you will be in a much better position to diagnose the trouble and locate and repair it quickly and efficiently. Some manufacturers give the colour code of their wiring which is worth studying as it helps you recognise each circuit quickly, others give the catalogue number of each component used in the set. This is of great value as it helps you to order the correct replacement part which is most important in receivers of special or unusual design.

In the service data and circuits you will notice that some manufacturers use the letter "E" to denote voltage at any particular point



PHILIPS

Since 1891

Electricity are manufacturing in ever-increasing quantity

Vital Equipment for All

Three Services.

PHILIPS

LAMPS (A'SIA) PTY. LIMITED

MAKE YOUR MONEY FIGHT — BUY SAVINGS BONDS OR CERTIFICATES!

no that Ep: Esc: and Ek denotes plate, screen and cathode voltage respectively, similarly "I" is used to denote current and so Ip: Isc; If: denote plate, screen and filament or heater current respectively, and as these voltage and current readings in all circuits are so important it is well that all should understand this nomenclature.

In certain circuits each component is numbered so that by reference to the key provided in the data the value of these components can be found. Attention should also be paid to the fact that certain circuits have the voltage at each particular point marked on the circuit. While in a table adjoining the circuit diagram the resistance of each coil is marked, so that with the aid of the low resistance reading ohmmeter these values may be checked.

If you have a particularly difficult problem see if you can find a suggestion in the many other special servicemen's articles that have been included, for it is our honest belief that with your knowledge and the data we have included in this Manual the lot of the serviceman will be much easier than it has ever been before. It is not, of course, the intention of the Manual to make the novice or inexperienced serviceman, an expert, but to help every person who services a radio set to do so with greater speed accuracy and assurance than has been possible hitherto without a standard r ference work of this kind.

Remember that all tests must be made with prescribed apparatus, such as recommended in our article on test equipment, or suggested by the manufacturers themselves, for example all voltage readings are read on a 1000 ohm per volt scale for D.C. readings, and if a lower ohmage meter is used the readings obtained will be wrong and misleading. Be accurate and follow the manufacturer's instruction, is a good radio axiom.

Recommended Test Equipment

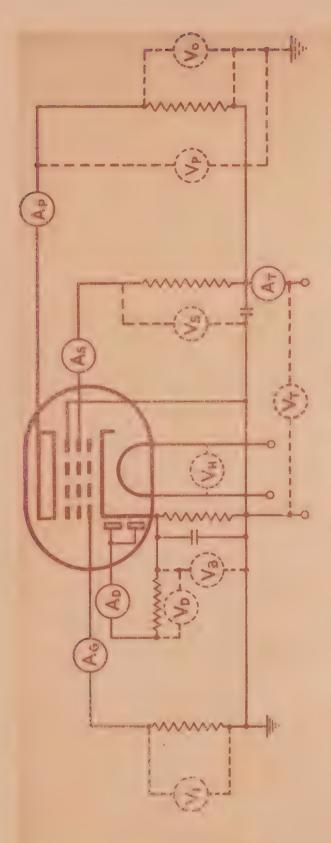
A SUMMARY OF HOW TO USE IT.

This Service Manual has been produced to assist the practising serviceman to give quicker and better service to his employer, his customer and himself by assisting him with essential data in an easily accessible form. An experienced serviceman will hardly require this discussion on Test Equipment, as most likely he has already assembled an efficient kit, which he knows how to use to greater advantage than it would be possible for any Service Manual Editor to tell him. But we realise that this Manual will be referred to by radio dealers, radio jobbers, apprentices and servicemen of the future who have very little technical experience, and will find a lead such as we give in this summary of incalculable value, helping them on the right road to efficient and speedy service, enabling them to get even more value from the rest of the Manual than they could hope to obtain otherwise.

It is not our intention to give a complete thesis on Service Test Equipment. The purpose of this discussion is to lay down what is considered to be the minimum apparatus with which any serviceman can give efficient service, and then give a few practical hints on how this gear may be used to the best advantage.

The Apparatus

The first piece of apparatus for the servicemen's Test Equipment is a Volt-Ohm-Milliampere Meter, with a 1000 ohm per volt, Voltage Ranges of 0 to 10; 0 to 50; 0 to 100: 0 to 250, and 0 to 500 volts D.C.; 0 to 10 and 0 to 500 volts A.C.; 0 to 1; 0 to 10: 0 to 50: 0 to 100 and 0 to 250 milliamperes: 0 to 100 ohm low-reading Ohmmeter Scale and an 0 to 100,000 or more Ohmmeter Scale. The second piece of apparatus is a Portable Modulated Signal Generator, capable of covering without gaps all frequencies from 100 to about 23,000 k.c., complete with dummy antenna, accurate attenuator and a three range output meter. 0-10, 0-25 and 0 to 50 volts. Thirdly, an accurate Valve Checker for testing a complete range of valves as used in



METERS: WHERE TO PUT THEM.

This diagram is intended to refresh the memory of users with regard to fundamental practice.A diode-pentode was chosen for illustration since its elements permit broad analysis of meter placement in virtually all tube circults.

Becuase modern testing equipment is designed to conserve the harrassed serviceman's thinking-time there is always danger that the individual meters comprising such instruments may not be used to best advantage ...

VOLTAGE MEASUREMENTS.

- VB (Grid Bias) High resistance voltmeter (0-10-60)
 VD (Diode Voltage) High-resist. voltmeter or v.t.v.m.
 - (0-1-5)
 VH (Heater Voltage) Low scale of a.c. voltameter
- (0-10-25)
 V1 (Signal Voltage) Output meter or v.t.v.m.
 V0 (Output Voltage) Output meter or v.t.v.m.
 VF (ilate Voltage) High resistance voltmeter (0-250-
- VS (Screen Voltage) High resistance voltmeter (0-100-500)

CURRENT MEASUREMENTS.

- AD (Rectified Current) Microanmeter or low-range ma (0-0.05-1.0)
- AG (Grid Current) Microsumeter or low-range (O-0.05-1.0)
 AP (Plate Current) Milliammeter (O-5-100).
- AP (Plate Current) Millianmeter (0-5-100).
 AS (Sereen Current) Low-range d.c. millianmeter
 - AI (Total Current) Low-range d.c. milliammeter (0-1-10)
- Actual voltages slightly higher than mater reading, accouracy dependent upon resistance of instrument.

Australian designed radio receivers, or ready access to such an instrument at all times. A fourth piece of testing apparatus is a Condenser Tester suitable for testing mica, paper and electrolytic types of condensers and is a very valuable adjunct to the servicemen's kit, for, although it can be done without by using the other apparatus we have laid down, it haves so much time and avoids so many possible errors that it soon pays for the additional outlay it entails.

Using the Apparatus

Knowing what equipment the complete serviceman should have and a brief summary of its uses will be valuable at this juncture, although complete treatment of each individual unit is dealt with in Chapter 6 on General Service Information. First of all we have our Volt-Ohm-Milliampere Meter with many ranges, so consider what uses we can place this instrument to when servicing a radio receiver. Many of our circuit diagrams give plate, screen grid filament and output voltages, as well as other point to point voltages, and the voltmeter enables you to check these for all receivers by placing them in the positions indicated in the diagram, "Meters—Where to put them." The large number of D.C. ranges are necessary for, as a serviceman, you will be called upon to test voltage from 1.5 volts up to 500 volts in many steps in the course of an ordinary day's service work. In fact, the uses of a voltmeter are so numerous that it is impossible to list them, but experience will teach you how to get maximum service from your voltmeter. The A.C. scales will enable you to check A.C. valve filament voltages, mains input voltages, output in A.C. voltages from power transformers and generators. All voltage tests for both D.C. and A.C. tests being made under working conditions.

The Ohmmeter is perhaps the most valuable section of the combination meter, as it, first of all, enables you on the low range scale to test the continuity of tuning coils intermediate frequency transformers, R.F. chokes, speaker-voice coils, filament or heater circuits, low resistance rheostats and bias resistors, and many other parts in a radio receiver and associated apparatus too numerous to mention. With the high ohm scale you are enabled to test resistors, transformer windings of the audio and speaker input type, field coils, coupling and filter chokes, and obtain

an indication as to the condition of fixed condensers as well as many other simple applications on the service bench. The Manual circuit data gives you all the component values, and as a serviceman with an Ohmmeter you can quickly check most of these in turn and so often locate the fault.

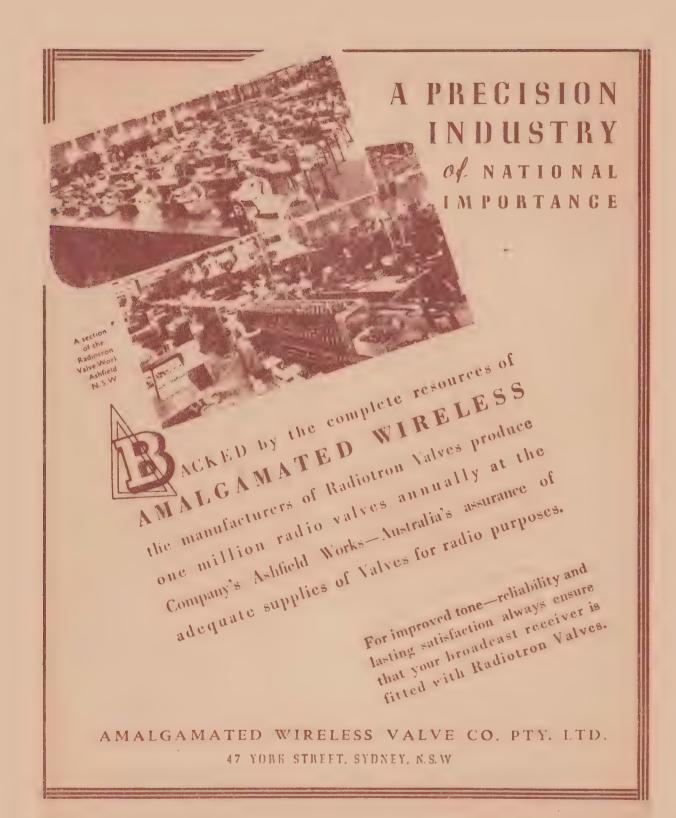
The Milliamperemeter ranges amongst other things, enables you to test the plate current, the screen current, or the total current flowing in each particular circuit by merely placing the Milliamperemeter section of the combination with an appropriate scale range in the circuit under test, in a manner shown in the diagram, "Meters—Where to put them," on page twelve.

The Milliamperemeter enables you to make a rough check of valve efficiency, circuit current values as laid down by the valve and circuit designers, and at the same time locate any existing fault and its cause.

Signal Generator

The Portable Signal Generator is really a miniature broadcasting station under the complete control of the serviceman, and is used to correctly align the various tuned stages of a receiver so that each type will beat in unison, although certain stages handle different frequencies to others. A dummy antenna has been specified so as the receiver is submitted to a set of conditions in its aerial circuit that would exist if the set was operated from a normal aerial under broadcasting conditions of reception. The attenuator is fitted to the Signal Generator because, when supplying a signal to radio receiving equipment, the sensitivity of which may vary over a very wide range, some means of varying the output of the oscillator is essential so as to keep the signal output from the receiver within the limits of the outputmeter ranges.

The output meter is really an A.C. voltmeter used to read the signal voltage resulting from a given modulated input. When aligning a set with a Signal Generator the necessary trimmer and padder adjustments are made until, with a given input, the maximum overall output is obtained when the set is said to be peaked or aligned. The output meter provides a visual method of reading the output signal intensity accurately, because the human ear cannot accurately detect small variations of sound intensity. Other forms of output indicators such as Vacuum tube voltmeters and Cathode Ray units are used as output indicator in modern service equipment.



The serviceman uses his Signal Generator and its accessories to align all types of radio frequency and intermediate frequency circuits: to align oscillator circuits and pad them so as they will cover a wide band of frequencies at the correct alignment; to test valves under working conditions; to ascertain gain of audio amplifiers following the radio frequency side of a receiver; to test the efficiency of Automatic Volume Control circuits and, finally, to test the selectivity of any tuned circuit at radio frequencies.

The Valve Checker is the next piece of apparatus for consideration. It is our considered opinion that the serviceman's first step in most cases when called to service a receiver is to test the valves. The simplest and quickest way to do this is with a Valve Checker, and as Valve Checkers are available complete with the volt-ohm-milliamperemeter combination, the bulk of two instruments is avoided in the serviceman's kit.

When you have established that the valves in a set under service are in good order, it is possible to proceed with the remaining components of the unit until the fault is located.

The final piece of test apparatus we have recommended is the Condenser Tester, which is suggested in the light of an alternative, because the Ohmmeter or the Milliamperemeter and Voltmeter, with the aid of the power supply output of the set, can be called upon to fulfil the job, but as modern servicing calls for quick, accurate and inexpensive work the Condenser Tester should be a part of the modern serviceman's test equipment, as it enables condensers of all types to be accurately and speedily tested for leakage, breakdowns and loss of capacity, this latter factor being very hard to judge by other methods. Fortunately, in this case also, Condenser Testers in combination with valve checker and volt-ohm-milliamperemeter is available at moderate cost.



OUR THANKS

The publishers desire to express their appreciation of the generous co-operation extended by Australian Radio Manufacturers in making available for publication the circuits and data of their individual models, thus making possible the publication of this, the third edition of Australia's Official Radio Service Manual.

AIRZONE RADIO

Manufactured by Airzone (1931) Ltd., Sydnev

AIRZONE 457 (Chassis Type 407)

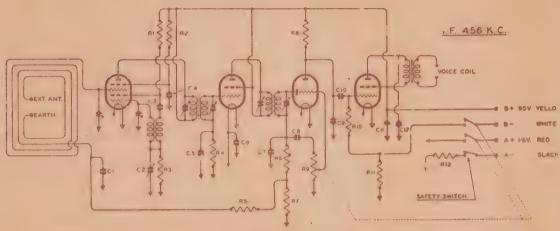
B/C Portable 1.4 Volt

IA7G

IN5G

1H5G

1Q5G



```
R5 - 1M ohms 1 Watt
R6 - .5M ohms 1 Watt
C1 - .05mf 200V Paper
                                C9 - 250mmf mica
C2 - 5 plate Adj.Pad.
                                Clo- .Olmf 400V Pap.
C3 - 1000mmf mica
                                Cll- 8mf elec.525PV
                                                             R7 - .1M ohma
                                                                                Watt
C4 - . C5mf 400V Paper
                                C12- 4000mmf 400V Pap.
                                                             R8 - .5M ohms \frac{1}{2}
05' - .05mf 200V Paper
                                R1 - 10K ohms & Watt

R2 - 50K ohms & Watt

R3 - .25M ohms & Watt
                                                             R9 - .5M ohms V.C.
                                                             R10- 1M ohms 1 Watt
C6 - .3mf 200V Paper
                                                             R11- 600 ohms W/Wnd.
C7 - 100mmf mica
C8 - .Olmf 400V Paper
                                R4 - 2M ohms } Watt
                                                             R12- .3 ohms
```

Valves: 1A7G. Convertor, 1N5G, I.F. Amp. 1H5G Det. Audio, 1Q5G, Power Amplifier.

	PIA'	ľE	SCI	REEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1A7G	83	.5 ma.	38	.83m.a.	70	0
1N5G	83	.68 "	83	.18 "		0
1H5G	32	.05 "				0
1Q5G	80	5.5 **	83	8 "		6.5

Total "B" Battery drain, no signal - 10 M.A.

Total "A" Battery drain, .25 amp.

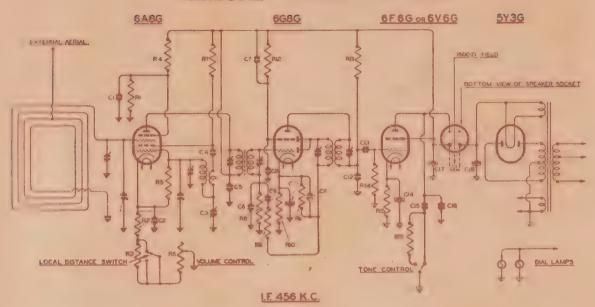
In earlier releases using a 1C5G in lieu of the 1Q5G, R11 was 850 ohms and in some of these models R4 together with its by-pass condenser C5, was not used in the grid circuit of the 1N5G.

Type 531A)

5 Valve A.C. Dual Wave

	.05mf 400V Paper	C905mf 400V Pap.	C1902mf 400V Pap.
C2 -	.lmf 400V "	Clolmf 400V Pap.	320- 10mf elec. 40PV
	3100mmf mica plus	Cll02mf 400V Pap.	321- 5000mmf mica
	or minus 1%	Cl2- loommf mica	C22- 16mf elec.Reg.
C4 -	1000mmf mica	Cl3- 250mmf mica	C23- 8mf elec.500PV
C5 -	2 plate Adj.Pad.	Cl4Olmf 400V Pap.	C24lmf 400V Pap.
C6 -	300mmf mica plus	C1525mf 400V "	R1 - 10K ohms \(\frac{1}{4}\text{W}\)
	or minus 3%	Cl6- 250mmf mica	R2 - 300 ohms w/w
C7 -	8mf elec. 500 PV	C17Olmf 400V Pap.	R3 - 50K ohms \w
C8 -	.lmf 400V Paper	C18Olmf 400V "	R41M ohms \frac{1}{4}W

AIRZONE CHASSIS TYPE 6641A



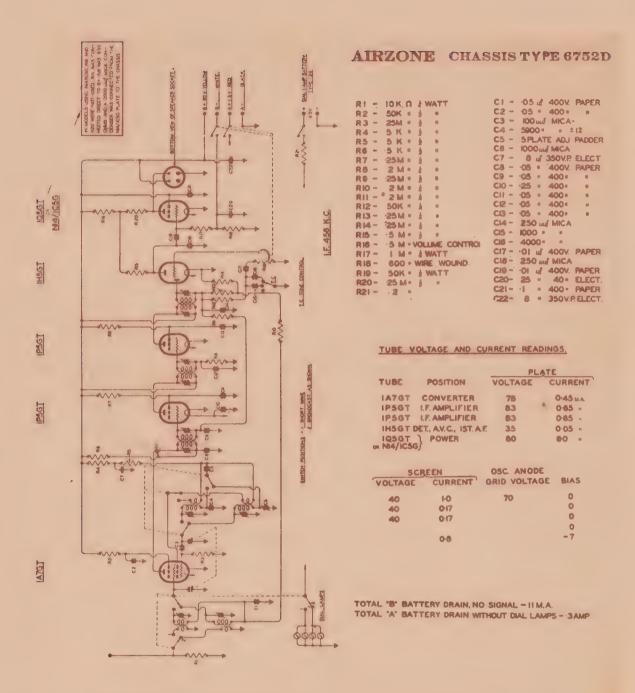
RI - 50 K Ω J WATT	CI - 05uf 400 V. PAPER
	C2 - · 1 · · 400 · · ·
R2 - 400 · WIRE WOUND	C3 - 5 PLATE ADJ. PADDER
R3 - 2K . ! WATT	C4 - 1000 mf MICA
R4 - 30K + 1 +	C5 - 14 400 V. PAPER
R5 - 50K + 4 +	C6 - 250 uuf MICA
R6 - 5K + WIRE WOUND VC.	
R7 - 20K + 1 WATT	C7 - 02 uf 400V. PAPER
	C8 - 05 * 400 * *
R8 - 5M + 4 +	C9 01 + 400 + +
R9 - 25M · ‡ ·	CIO - 10 " ELECT. 40 V.P.
RIO - IK · į /	CII - 250 cuf MICA
RII - 5M + 4 +	CI2 - 1000 + +
RI2 - 5M + 1 .	CI3 - OI of 400V PAPER
RI3 - 50K + 1	CI4 - 10 . ELECT. 40 V.P.
RI4 - 5M + 1 +	C15 - 02 4 400V. PAPER
RIS - 460 · WIRE WOUND	C16 - 5000 mil MICA
RIG - 15 K - 1 WATT	
110 1014 2 1041 1	C17 - 8 uf ELECT. 500V.P.
	CIA - A

TUBE VOLTAGE AND CURRENT READINGS.

		PLATE		SCREEN		OSC. PLATE		
TUBE	POSITION	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BIAS	
6A8G	CONVERTER	230	1-75 MA.	80	3-25 MA	160	-3:25	
6G8G	I.F., DET., Ist A.F.	125	1·75 #	35 /	3 1		-1.75	
6F6G	POWER	212	28 *	230	5.0 *		-44-5	
5Y3G	RECTIFIER	OUTPL	JT - 300 VO	LTS.				

ALL MEASUREMENTS TO BE MADE WITH NO SIGNAL TURED IN AND WITH CONTRELS IN THE MADMAIN CLOCKWISE POSITION DUE ALLCOMINGES SHOULD BE MADE FOR SLIGHT LINE VOLTAGE WARRINGNIS.

THE FIGUREM'S CONTROLL AND MADEAUGHTOWN HIS FILE MANNES VOLTAGE 123 DOR 2740 VOLTS WHICH EVER RANGE IS SELECTED ON THE TRANSPORMER TAP TAPPEGES ON POWER TRANSPORMER TERMAND, STRIP PROVIDE THE FOLLOWING RANGES
BLACK AND VILLOW 200 TO 2304 BLACK AND RED 230 TO 2304



ALL MEASUREMENTS TO BE TAKEN WITH SWITCH IN SHORT WINE POSITION AND NO SIGNAL TURED IN SO THAT A VIC. WILL NOT PLACTION AND AFFECT OPERATING VOLTAGES AND CURRENTS.

ALL VOLTAGES AND CURRENTS.

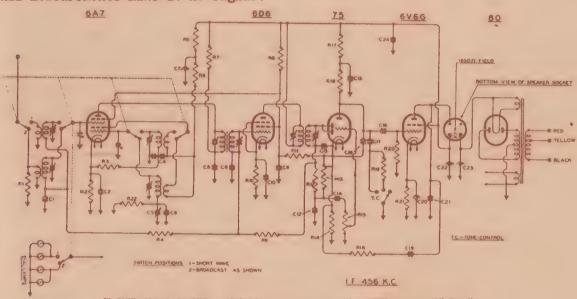
ALL VOLTAGES AND WITH RESPE

AIRZONE 5071 (Continued)

```
R5 - 5K ohms & Watt
                                   R11- 20K ohms & Watt
                                                                      R17- 50K ohms 1 Watt
                                  R12- 50K ohms watt
R13- .25M ohms watt
R14- 200 ohms w/Wnd
                                                                       R18- .1M ohms
R19- 20K ohms
R6 - 5K ohms & Watt
R7 - 4K ohms & Watt
                                                                                            Watt
R8 - 10K ohms 2 Watt
                                                                      R20- .5M ohms & Watt
R21- 250 ohms W/Wnd
                                  R15- .5M ohms V.C.
R16- .25M ohms ½ Watt
R9 - 1M ohms & Watt
R10- 400 ohms W/Wnd.
                                                                     R22- 20K ohms & Watt
Valves: 6A7, Convertor. 6D6, I.F. Amp., 75, Det. A.V.C. 1st A.F. 6V6G, Power. 80, Rectifier.
```

	PLAT	re	SCI	REEN .	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A7	210	4.5m.a.	100	4.0m.a.	170	4.6
6D6	235	8.0 *	100	2.5 **		4.6
75	130	.3 7				1.2
6V6G	217	40.0 "	235	3.2 "		10.5
80	Output-3	580 volts				

All measurements made at no signal.



AIRZONE 5056 (Charsis Type 536)

5 Valve A.C. Broadcast

C3 - Adj. Pad.6 Plate C41mf 400V Paper C525mf 400V Paper C605mf 400V Paper C7 - 100mmf mica C8 - 100mmf mica C9 - 10mf elec.25V.W. C1001mf 400V Paper C1101mf 400V Paper	C14- 5000mmf mica C1505mf 400V Pap C16- 16mf elec.500V C17- 8mf elec.500V. R1 - 10K ohrs 1 Wat R2 - 30K ohrs 2 Wat P3 - 50K ohms 2 Wat R4 - 10K ohms 1 Wat E5 - 200 ohms W Wn	R8 - er P9P. R10- P. R11- R12- t R13- t R14- t R15- t R16- d R17-	20K ohms watt 50K ohms watt .25M ohms www 50M ohms v.C25M ohms ww 50M ohms watt 50K ohms ww 460 ohms www 5K ohms ww 15K ohms ww
C12- 250mmf mica	R6 - 1M ohms 1 Watt	R18-	300 ohms W/W
VALVE VOLTAGE CURRE 6A8G 215 4.0	SCREEN NT VOLTAGE CURRENT 100 4.0 100 2.0	GRID VOLTAGE	BIAS 4.0 4.0

AIRZONE 5056 (Continued)

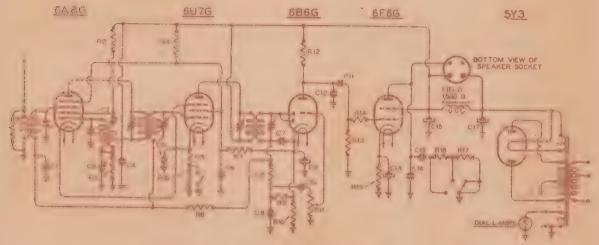
PLATE			SCREEN		OSC. ANODE		
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BTAS	
6B6G	100	.4				.1	
6F6G	210	25	215	5.0		13.5	
5Y3	Output -	- 305 vol	ts.				

VALVES:

6A8G - Convertor. 607G - I.F. Amplifier 6B6G - 2nd Det. Audio 6F6G - Power

5Y3 - Rectifier.

All measurements made at no signal.



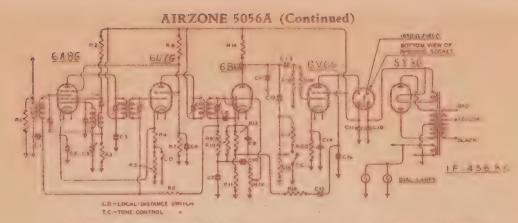
AIRZONE 5056A (Chassis Type 536A) 5 Valve A.C. Broadcast

C6 - .05mf 400V Paper C7 - 100mmf mica C8 - 100mmf mica C9 - 10mf elec.40 PV. C10-.01mf 400V Pap. C11- 250mmf mica R1 - 10K Watt R14- 25M ohms } Watt - 30K Watt R15- .25% ohms | Watt R16- .5% ohms | Watt R17- 20% ohms | Watt R18- .1% ohms | Watt R19- 50% ohms | Watt - 50K ohms Watt ohms W Wnd R18- .1k olms Watt R19- 50K ohms Watt R20- 250 olms W/Wnd. R6 - 10K ohms 2 Watt - 20K chms & Watt C12- .Clmf 400V Fap C13- .Olmf 400V " R8 - 1W ohns & Watt R8 - 50K chms & Watt C1 - .lmf 400V Paper C2 - .25mf 400V W C3 - Adj.Pad.6 Plate C4 - 1000mmf mica C14- 10mf elec.40PV C15- .02mf 400V Pap. C16- 5000mmf mica C17- 16mf elec. Reg. C18- 8mf elec. 500PV R10- .25M ohms \ W R11- 20e ohms \ Wnd R12- .5M ohms V.C. R13- 4K ohms \ Watt C5 - .1mf 400V Paper

Valves: 6A8G Convertor. 6U7G I.F. Amp. 6B6G Det. A.V.C., 1st A.F. 6V6G Power. 5Y3G Rectifier.

	PL	ATE	. SC1	REEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A86	175	4.1	95	3.8	148	4.0
6 0 76	200	5.6	95	1.6		4.0
6B60	75	.2				.8
6V6G	185	34	200	3.6		10
5Y3G	Outmit -	- 305 #03	t a			40

All measurements made at no signal.

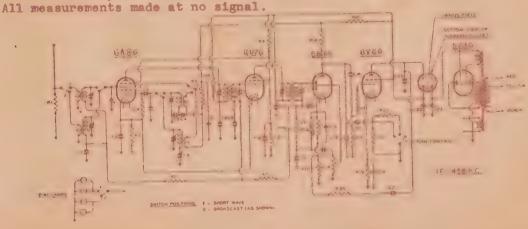


AIRZONE 5057A (Chassis Type 537A) 5 Valve A.C. Dual Wave

```
08 - .1mt 400V Paper C9 - .05mf 400V "
R1 - 10K ohms 1 Watt
                                    R16- .25M ohms } Watt
                                    R17- 50K ohms 1 Watt
R18- .5M ohms 1 Watt
R19- 250 ohms W Wat
R2 - .1M ohms { Watt
                                                                         C10- .05mf 400V "
C11- 1mf 400V "
C12- 100mmf wica
C13- 100mmf rics
C14- 10mf election
F3 - 200 ohms W/W
14 - SOK ohns & Watt
FE - 5F ohms & Watt
                                    R20~ .1M ohre & Witt
R21- 5K ohre & West
                                    822 - 20K ohme 3 Watt Cl - .05mf 40mv Pap.
27 - 10 ohms & Watt
                                                                         015- .Clmf 0000 40.
Cl5- 250mm?
ng - 200 ohes & Watt
                                    02 - .250f 400V . D.
                                                                         C3 - 100mmf mics
04 - 100mm;
C5 - 39000 - 1115 1115
or minus 1%
R10- 50K ohms 1 Watt
RIL- Phi ohms ; Walt
R12- 4K ohms | Watt
R13- 200 ohms W/Wnd.
                                                                         C%1- .02wf 400V Pap.
C72- 16mf elec.40CPV
                                    C6 - 6 plate adj.pad.
R14- .5M ohms V.C.
                                    C7 - 8mf elec.500 P.V
R15- 25M ohms 1 Watt
                                                                         C23- 8mf elec. 500PV
```

Valves: 6A8G Convertor. 6U7G I.F. Amp. 6B6G Det., A.V.C., 1st A.F. 6V6G Power. 5Y3G Rectifier.

	PLA'	PE	SCI	REEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GEID VOLTAGE	
6A8G	170	4.2	93	5.6	142	3.8
607G	195	5.8	95	1.6		3.8
6B6G	73	.3				.8
6V6G	180	33	195	4.0		10
5Y3G	Output .	- 295 vol	ts			



AIRZONE 5080 (Chassis Type 540) 5 Valve A.C. Broadcast

R1 - 10K ohms } Watt R16- .25M ohms } Watt R17- 1M ohms 1 Watt C8 - .lmf 400V Paper C9 - .02mf 400V Paper Cl0- l00mmf mica Cll- l00mmf mica R2 - 300 ohms W/W R3 - 1M ohms 1 Watt
R4 - 20K ohms 2 Watt
R5 - 30K ohms 2 Watt R18- .25M ohms & Watt R19- .1M ohms & Watt R20- 20K ohms & Watt Cl2- .25mf 400V Paper Cl3- .05mf 600V Paper Cl4- .01mf 400V Paper R6 - 4K ohms & Watt R7 - 10K ohms 2 Watt R21- .5M ohms & Watt R22- 250 ohms W/Wnd R8 - 400 ohms W/Wnd C1 - .05mf 400V Pap. C2 - 11mf 400V Pap. C15- 250mmf mica R9 - 1M ohms 1 Watt
R10- 20K ohms 1 Watt
R11- 50K ohms 1 Watt
R12- .25M ohms 1 Watt
R13- 200 ohms W/Wnd C15- 250mm mica C16- .01mf 400V Paper C17- .01mf 400V Paper C18- .02mf 400V Paper C19- 10mf elec.40 P.V. C20- 5000mmf mica C21- 16mf elec.Reg. C22- 8mf elec. 500 P.V. C3 - 2 plate adj.pad. C4 - 300mmf mica plus or minus 3% .

PLATE SCREEN OSC. ANODE VALVE VOLTAGE CURRENT VOLTAGE CURRENT GRID VOLTAGE BIAS 6A8G 210 4.0 100 5.2 115 4.4 6U7G 230 7.0 2.0 100 4.0 5680 .5 50 20 .1 6V6G 35.0 215 3.8 11.0 Output - 380 volts

C5 - 2000mmf mica

06 - .1mf 400V Pap. C7 - .05mf 400V Pap.

R14- .5M ohms V.C. R15- 50K ohms & Watt

6A8G

All measurements made at no signal. VALVES: 6A8G Convertor. 6U7G I.F. Amp. 6G8G Det., A.V.C., 1st A.F. 6V6G Power. 5Y3G Rectifier.

6U7G

AIRZONE 5080 (Chassis Type 540)

5 Valve A.C. Broadcast

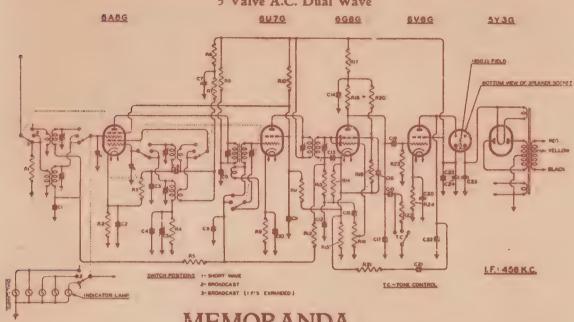
8 V 6 G

5Y3G

5 G 8 G

BOYTOM VIEW OF SPEAKER SOCKET. - VELLOW DIAL LAMPS INDICATOR LAMP T C - TONE CONTROL S C .- SELECTIVITY CONTROL I.F.: 456 K.C.

AIRZONE 5081 (Chassis Type 541) 5 Valve A.C. Dual Wave



AIRZONE 5081 (Continued)

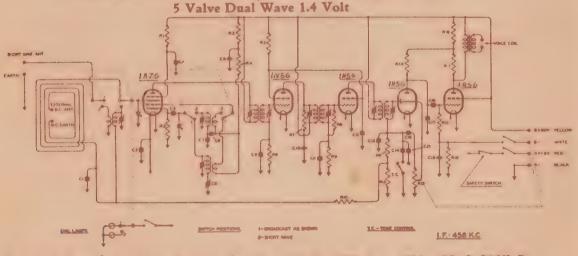
```
R1 -10K ohms W
                                                                    C14-.25mf 400V Pap.
C15-.01mf 400V Pap.
C16-.05mf 400V Pap.
                     R14-.25M ohms 1W
                                           C3 -3100mmf mica
R2 - 300 " W/W
                     R15-200 ohms W/W
                                               plus or minus 1%
R3 -50K ohms W
                     R16-.5M ohms V.C
                                           C4 -300mmf mica
R4 -20K ohms
                     R17-50K ohms bw
                                           plus or minus 3%
                                                                    C17-250mmf mica
                                           C5 -2 plate adj.pad C18-.Olmf 400V Pap. C6 -1000mmf mica C19-.Olmf 400V Pap.
                     R18-.25M ohms W
R5 -.1M
               多城
R6 -5K ohms
                     R19-.25M ohms
                                                                    C20-10mf elec. 40VP
C21-.02mf 400V Pap.
R7 -5K ohms
                     R20-1M ohms 1W
               P.M.
                                           C7 -8mf elec.500VP
               ·安W
                                           C8 - . 05mf 400V Pap.
R8 -4K ohms
                     R21-.1M ohma WW
                     R22-20K ohms
                                           C9 -.1mf 400V
R9 -400 ohmsW/W
                                                                    C22-5000 mmf mica
                                      W
                                                                    C23-.lmf 4(OV Pap.
C24-16mf elec. Reg.
C25-8mf elec. 500VP
                                     I'W
R10-10K ohms 2W
                                           Clo-.lmf
                     R23-.5M ohms
                                           C11-,02mf "
R11-20K ohma &W
                     R24-250 ohms W/W
R12-1M ohms 1W
                     C1-.05mf 400V Pap.C12-100mmf mica
                     C2-.1mf 400V
                                           C13-100mmf mica
R13-50K ohms 3W
```

VALVES: 6A8G Convertor. 6U7G I.F. Amp. 6G8G Det., A.V.C., 1st A.F. 6V6G Power. 5Y3G Rectifier.

PLATE			SCRI	een .	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A8G	218	4.5	105	4.0	170	5.0
607G	237	7.5	105	2.4		4.5
6G8G	45	.5	15	.2		1.2
6V6G	215	39.0	237	3.7		11.5
EWEN	D 0 0 0	t 400				

All measurements made with switch in short wave position and no. signal.

AIRZONE 5085 (Chassis Type 542)



R11-.5M ohms 1W C2 -.25mf 400V Pap C11-.05mf 200V Pap. R1 -50K ohma 2.V C12-.05mf 400V Pap R12-.1M ohms $\frac{1}{4}$ W C3 -100mmf mica R2 -.25M " Cl3-100mmf mica R3 -5K ohms 1 R13-.5M ohms VC C4 -.05mf 400V Pap C14-1000mmf 400V Pap. C15-4000mmf 400V Pap R14-.5M ohms W C5 -8mf elec.525PV R4 -5K ohms R15-1M ohms W C6 -2000mmf mica R16-50K ohms W C7 -3300mmf mica R17-.25M ohms plus or minus 1% R5 - . 1M ohms C16-.Olmf 400V Pap. R6 -2M ohms W C17-250mmf mica R7 - . 1M ohms R18-600 ohmsW/W C8 -5 plate adj pad C18-.01mf 400V Pap R8 -.1M ohms " C19-25mf elec. 40PV Cl -.05mf 400V C9 -.05mf 200V pap R9 -2M ohms lW Clo-8mf elec.350PV Paper R10-1M ohms VALVES: 1A7G Convertor. 1N5G I.F. Amplifier. 1N5G I.F. Amplifier. 1H5G - Det., A.V.C., 1st A.F. 1Q5G Power.

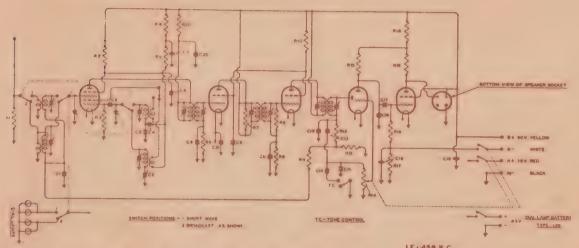
Earlier Models were released with a 1056 in lieu of the 1Q56 shown, and the limiting resistors R6 and R9 together with their by-pass condensors C9 and C11 were not used in the grid circuit of the 1N56's.

AIRZONE 5085 (Continued)

	PLA!	re	SCRI	CEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT			GRID VOLTAGE	BIAS
1A7G	83	.5	38	.83	70	DINO
1N5G	83	.68	50	.17		0
1N5G	83	.68	50	.18		0
1H5G	35	.05				0
1Q5G	80	5.5	83	.8		יניו
Total "A"	drain 3	amp.	Total "B"	drain,	no signal 11 M.	A .

Total "B" drain, no signal 11 M.A. AIRZONE 5098 & 5099 (Chassis Type 544 & 544A)

5 Valve Dual Wave 1.4 Volt LA7G IN5G



			.t. '450 K.C.
R1 -10K ohms 1W	R125M ohms W	C3 -3900mmf mica	Cl3Olmf 400V Paper
R2 -50K ohms W	Rl3lM ohms "	plus or mins 1%	C14001mf " "
R325M ohms"	R145M ohms VC	C4 -1000mmf mica	
R4 -5K ohms W	R155M ohms aw	C5 -5Plate adj.oad.	C16-250mmf mica
R5 -5K ohms W	R16-1W ohms W	C605mf 400V pap.	Cl7Olmf 400V Paper
R6 -2M ohms WW	R17-600 ohmsW/W	C7 -8mf elec.500PV	C18- 25mf elect.
R71M ohms"	R18-50K ohms W	C805mf 400V Pap.	40PV
R81M ohms"	R1925M ohms"	C9 05mf 400V Pap.	C19- 8mf elec.
R9 -2M ohms "	R20-5K ohms w		350PV
R101M ohms W	C105mf 400V Pap.	C1105mf " "	02005mf 400V
R11-1M ohms W	C2-100mmf mica	Cl2-100mmf mica	Paper
VALVES: 1A7G Co	nvertor. 1N5G I.F.	Amplifier, 1N5G I.F	.Amplifier.
THE PART OF THE PART OF THE	A T.L L S BACK S		

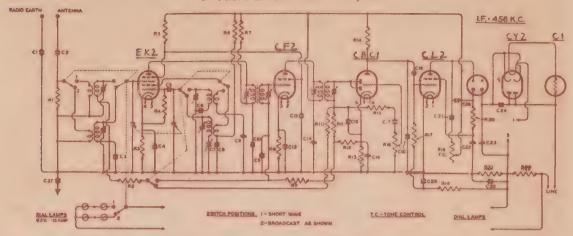
1H5G Det., A.V.C., 1st A.F. 1Q5G Power.

	PLAT	re	SCRI	een	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1A7G	83	.5	38	.83	70	0
1N5G	83	.68	50	.17		0
1N5G	83	.68	50	.18		0
1H5G	35	.05				0
1Q5@	80	5.5	83	.8	•	7

Total "B" battery drain, no signal - 11 M.A. Total "A" battery drain, .3 amp.

Earlier models were released with a 105G in lieu of the 1Q5G shown, and the limiting resistors R6 and R9 together with their by-pass condensers C8 and C11 were not used in the grid circuit of the 1N5G's. R20 and C20 were not fitted to models prior to No.P8228.

AIRZONE 5069 (Chassis Type 549) 5 Valve Dual Wave A.C./D.C.



R1 -10K ohms \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	R15-50K ohms \(\frac{1}{4}W \) R165M ohms \(\frac{1}{4}V \) R1725M ohms \(\frac{1}{4}W \) R18-50K ohms \(\frac{1}{4}C \)	C5 -50mmf mica C6 -5900mmf mica plus or minus 1% C7 -6 plate adj. pad.	C16-lomf elec.40PV C1702mf 400V pap C18-500mmf mica C1902mf 400V pap C20lmf 400V pap
R7 -5K ohms R8 -500 ohms "	,	C81mf 400V pap C9 -8mf elec.500PV Cl01mf 400V pap.	C2105mf 400V pap C22-8mf elec.500PV C23-8mf elec.500PV
R9 -1M ohms \frac{1}{W} R10-1M ohms \frac{1}{W} R1125M ohms \frac{1}{R} R121M ohms \frac{1}{W}		C1105mf " " C121mf 400V pap C1305mf " " .C14-16mf elec.400PV C15-100mmf mica	C2401mf mica C2525mf 400V paper C26-5000mmf mica C2708mf 600V pap

	PL	AT15	SURI	515IV	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
EK2	155	8	55	1.1	125	4.0
CF2	160	2.6	55	1.1		1.9
CBCl	45	1.0				1.0
CL2	155	34	90	5.0		18
CAS	Output .	- 250 voit	9			

VALVES: EK2 Convertor. CF2 I.F. Amp. CBC1 Det. Audio. CL2 Power. CY2 Rectifier.

All measurements made with no signal tuned in. The figures shown are measured when the mains voltage is 240 volts A.C. The heater current for all valves is automatically controlled by the ballast valve and no adjustment to the receiver is necessary to suit various supply voltages.

AIRZONE 676 & 679 (Chassis Type 610 & 610E) 6 Valve A.C. Dual Wave

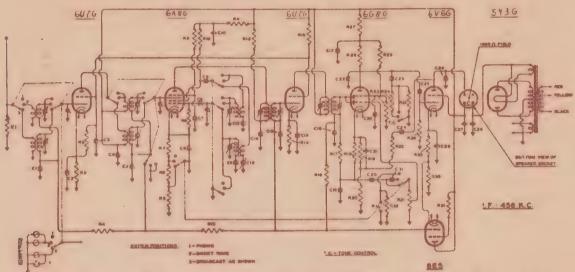
R1 -10K ohms 1W	R12-5K ohms W	R2325M ohms \ \ \	C2 1mf 400V paper
R2 -400 ohms W/W	R131M ohms W	R24-20K ohms www	C305mf 400V h
R3 - 30K ohms W	R14-400 ohms N/W	R25-1M ohms 1W	C4 1mf 400V "
R4 -1M ohms W		82625M ohms &W	C505mf 400V "
R5 -5K ohms W	RIG-1M ohms 3	R27-50K ohms W	C6 lmf 400V "
R6 -500 ohms "	R17-50K chms W	R285M ohms W	C705mf 400V "
R7 -400 ohms W/W	R18-,25% ohms "	829-250 ohms W/W	C8 -100mmf mica
R8 -50K ohms W	R19-2K office &W	R30-35 ohms W/W	C9 -500mmf mica
R9 -30K ohms W	R20-100 ohms W/W	R31-1M ohms 1W	ClO-8mf elec.550PV
RIO-10K ohms W	R21-,5M ohms VC	R32-50K ohms \{\}W	Cll-300mmf mica
R11-5K ohms lW	R221M ohms W	Cl05mf 400V pap.	plus or minus 3%

AIRZONE 676 & 679 (Continued)

C16-.1mf 400V pap. C17-.25mf " " C12-3 plate adj. C22-250mmf mica C28-8mf elec.500PV padder C23-.01mf 400V pap.C29-5000mmf mica C18-100mmf mica C13-3900mmf mica C24-.02mf " C30-.05mf 400V pap C25-.02mf " plus or minus 1% C19-100mmf mica C31- 1000mmf mica C14-.05mf 400V pap C20-.02mf 400V pap. C26-10mf elec.40PV C21-10mf elec.40PV C15-.05mf " reg. C27-16mf VALVES: 6U7G R.F. Amp. 6A8G Convertor. 6U7G T.F. Amp. 6G8G Det. A.V.C. 1st A.F. 6V6G Power. 5Y3G Rectifier. 6E5 Tuning Eye

PLATE SCREEN OSG. ANODE GRID VOLTAGE VOLTAGE CURRENT VOLTAGE CURRENT VALVE BIAS 6U7G 235 6.0 95 2.5 4.7 6ABG 3.0 210 3.5 95 5.0 140 6U7G 235 7.0 2.0 95 4.0 6080 45 .5 .2 15 1.1 6V60 215 3.0 40 235 12.5 **5Y3G** Output - 390 volts Target Voltage 235V., Target Current 1.5 ma. 6E5 fitted to chassis type 610E only. 6E5

All measurements made with no signal

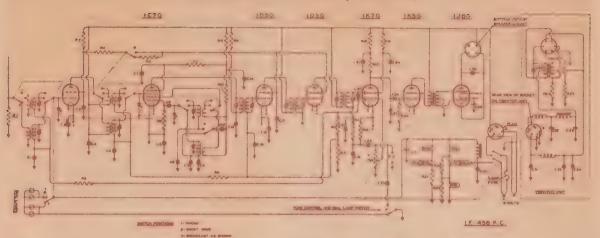


AIRZONE 753 & 753D (Chassis Type 703 & 703A)

7 Valve Dual Wave Vibrator

R17-.25% ohma &W R1 -10K ohms W C8- 100mmf mica C22-5000mmf mica C9 -3900mmf mics C23-2000mmf mice R2 -. 1M ohms W R18-.5M ohms VC R3 -1M ohms tw R19-1M ohms &W plus or minus 1% C24-.lmf 400V paper R4 - . 25% ohms W R20-.5% ohms +W C25-250mmf mica Clo-300mmf mica C26-.01mf 400V par C27-1000mf elec.12VP R5 -.25W ohms W R6 -50K ohms W R21-16.5 " W/W plus or minus 3% R22-33 ohms " Cl1-3 plate adj.pad R7 -30K ohms W R8 -1M ohms W R9 -10K ohms W R10-10K ohms W R23-16.5 " Cl2-1000mmf mice C28-2000mmf mics C29-100mf elec.8VF C13~.05mf 400V pap Cl4-8mf elec.500VP C30-2000mmf mica C15-.05mf 400V pap C16-.05mf 400V C31-.25mf 400V pap R11-5K ohms WW C32-8mf elec.500VP R12-.5M ohms W R13-.5M ohms W R14-.1M ohms W C3 -. lmf 400V C17-.1mf 400V pap C33-.25mf 400V pap C34-.01mf mica C4 -. lmf 400V C18-250mmf mics C5 - . 05mf 400V C19-250mmf mica 1500VT R15-.5M ohms Iw C6 -. 05mf 400V C20-100mmf mica C35-8mf elec.500VP R16-10K ohms WW C7 - . lmf 400V C21-.1mf 400V pap. C36-.02mf mical500VT

AIRZONE 753 & 753D (Continued)



VALVES: 1D5G R.F. Amplifier. 1C7G Convertor. 1D5G 1st I.F. Amplifier. 1D5G 2nd I.F. Amplifier. 1K7G Det. A.V.C., 1st A.F. 1K5G Driver. 1J6G Output.

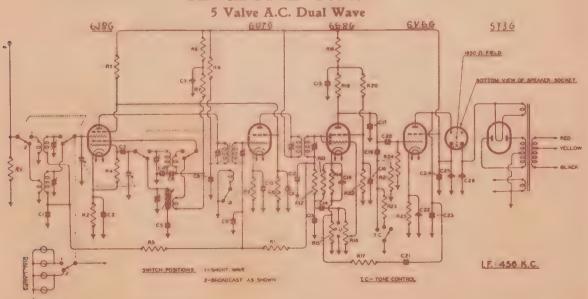
	PLAS	PE	SCRI	EEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	B1/S
1D5G	137	2.0	55	.75		-2
1C7G	127	1.0	50	1.5	70	-2
1D5G	137	.3	25	.1		-2
105G	137	.3	25	.1		-2
1K7G	50	.3	25	.1		0
1K5G	132	4.5				-4
1J6G	/135	1.2				-4
1900	135	1.2				-4

Total "B" current drain with no signal - 16 M.A.

Total "A" current drain, without pilot lamps - 1.15 A.

All measurements taken with switch in short wave position, and no signal and with respect to chassis.

AIRZONE 1052A



AIRZONE 1052A (Continued)

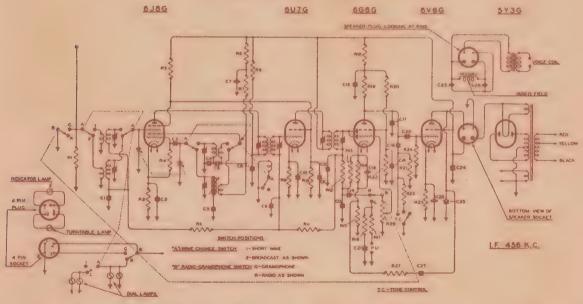
```
R15-100 ohms W/W
                                              C4 -4900mmf mica
                                                                     C16-10mf elec.40VP
R1 - 10K ohms W
R2 - 400 ohms W/W
                     R16-.5M ohms VC
                                              plus or minus 1%
                                                                     C17-250mmf mica
R3 -20K ohms 2W
                     R17-.1M ohms &W
                                              C5 -385mmf mica
                                                                     C18-.05mf 400V pap
R4 -30K ohms W
                     R18-50K ohms &W
                                              plus or minus 1%
                                                                     C19-5000mmf 400V
               1-W
                     R19-.25M ohms 1W
R5 - .1M ohms
                                                                             paper
                                              C6 -. 05mf 400V pap
                                                                     C20-.02mf 400V pap
C21-.01mf 400V "
R6 -20K ohms W
                     R20-1M ohms 1W
                                              C7 -8mf elec.500VP
                                              C8 -.05mf 400V pap
C9 -.05mf 400V
R7 -10K ohms W
                     R21-1M ohms \ \frac{1}{4}W
                     R22-.25M ohms \ \ \ \ \ \ \ \ \
R8 -5K ohms W
                                                                     C22-10mf elec.40VP
                     R23-20K ohms ½W
R24-.5M ohms ½W
                                              Clo-.lmf 400V
Cll-.05mf 400V
R9 -400 ohms W/W
                                                                     C23-5000mmf mica
                                                                     C24-.1mf 400V pap.
C25-16mf elect.
R10-30K ohms W
R11-1M ohms 1W
                                              C12-100mmf mica
                     R25-250 ohms W/W
                     C1 - .05mf 400V pap C13-100mmf mica
C2 -.1mf 400V " C14-.02mf 400V 1
R12-50K ohms W
                                                                            Reg.
                                              C14-.02mf 400V pap C26- 8mf elect.
C15-.25mf 400V pap. 500V.P.
R13-.25M ohms 1W
R14-2K ohms W
                     C3 -100mmf mica
VALVES: 6J8G Convertor, 6U7G I.F. Amplifier, 6G8G Det. A.V.C. 1st A.F.
6V6G Power. 5Y3G Rectifier.
```

	PLAT	re	SCRI	EEN	OSC.PLATE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CHRRENT	VOLTAGE	BIAS
6 J8 G	245	2.7	95	2,5	120	4.2
607G	260	7.8	95	2.0		4.4
6686	55	.5	15	.2		1.1
6V6G	240	40	260	5.0		12
5Y3G	Output .	- 410 Vol	ts			

All measurements made with switch in short wave position and no signal.

AIRZONE 1052AG

5 Valve A.C. Dual Wave



	R4 -30K ohms \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	R11-1M ohms 1W R12-50K ohms 1W R1325M ohms 1W R14-2K ohms 1W R15-100 ohms W/W R16-50K ohms 1W R171M ohms 1W		C105mf 400V paper C21mf 400V C3 -100mmf mica C4 -4900mmf mica plus or minus 1% C5 -385 mmf mica plus or minus 1% C605mf 400V paper
--	--	---	--	---

AIRZONE 1052AG (Continued)

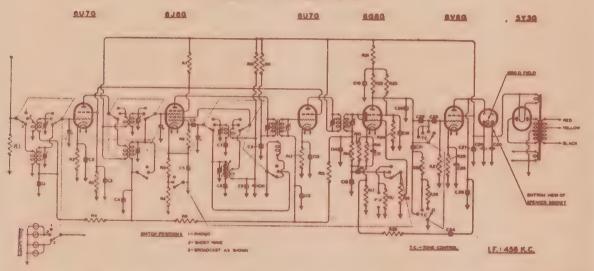
C8 -.05mf 400V pap C13-100mmf mica C18-.05mf 400V pap C23-5000mmf mica C9 -.05mf 400V " C14-.02mf 400V pap C19-5000mmf 400V " C24-.1mf 400V pap C10-.1mf 400V " C15-.25mf 400V " C20-.02mf 400V " C25-16mf elec.Reg C11-.05mf 400V " C16-10mf elec.40VP C21-5000mmf " " C26-8mf elec.500VP C12-100mmf mica C17-250mmf mica C22-10mf elec.40VP C27-.01mf 400Vpap. VALVES: 6J8G Convertor. 6U7G I.F. Amplifier. 6G8G Det. A.V.C. 1st A.F. 6V6G Power*. 5Y3 Rectifier.

	PLAT	LE	SCRI	SEN	OSC.PLATE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BIAS
6 J 8G	245	2.7	95	2.5	120	4.2
6070	260	7.8	. 95	2.0		4.4
6686	55	.5	15	.2		1.1
6V6G	240	40	260	5.0	•	12
5Y3	Output -	- 410 vol	te			

All measurements made with switch in short wave position and no signal.

AIRZONE 1062A

6 Valve A.C. Dual Wave



Rl -10K ohms 1W	R16-2K ohms &W	C305mf 400V pap	C1602mf 400V pap
R2 -400 ohms W/W	R17-100 ohms W/W	C4 05mf 400V "	C17-10mf elec.40VP
R3 -30K ohms W	R18-50K ohms W	C5 lmf 400V "	C1825mf 400V pap
R4 1M ohms W	R195M ohms VC	C6 -180mmf mica	C1905mf 400V "
R5 -400 ohms W/W	R201M ohms W	C7 -4900mmf mica	C20-250mmf mica
R6 -2K ohms \{\frac{1}{2}}W	R21-50K ohms W	plus or minus 1%	C2101mf 400V pap
R7 -20K ohms 2W	R2225M ohms W	C8 -385mmf mica	C22-1000mmf mica
R8 -30K ohms &W	R23-1M ohms 1W	plus or minus 1%	C2302mf 400V pap
M9 -1M ohms W	R2425M ohms W	C9 05mf 400V pap	C2402mf 400V "
R10-30K ohms W	R25-20K ohms W	Cin-8mf elec.500VP	C25-10mf elec.40VP
Rll-5K ohms W	R26-50K ohms 1W	C1105mf 400V pap	C26-5000mmf mica
R12-400 ohms W/W	R275M ohms AW	C1205mf 400V pap	C27lmf 400V pap
R13-1M ohms aw	R28-250 ohms W/W	Cl3lmf 400V pap	C28-16mf elec.Reg.
R14-50K ohms 4W	C105mf 400V pap		C29- 10mf elect.
R1525M ohms \(\frac{1}{4} \text{W} \)	C21mf 400V	Cl5-100mmf mica	500VP

VALVES: 607G R.F. Amplifier. 6J8G Convertor, 607G I.F. Amplifier. 6G8G Det. A.V.C. 1st A.F. 6V6G Power. 5Y3G Rectifier.

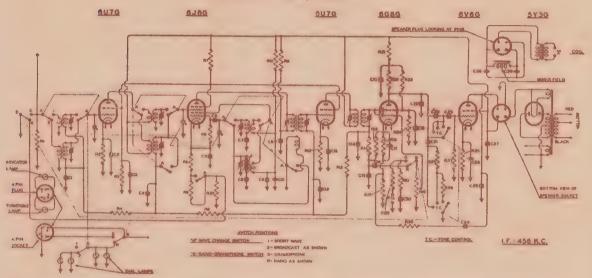
All measurements made with switch in short wave position and no signal tuned in.

AIRZONE 1062A (Continued)

	PL	ATE	SCRI	SIEN .	OSC.PLATE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BIAS
6U7G	235	7.2	85	1.7		-4.0
6J8G	225	2.0	85	1.7	110	-3.3
6T7G	235	7.2	85	1.7		-4.0
6G8G	60	.55	20	.12		-1.3
6V6G	220	40.0	235	2.5	,	11.5
5Y3G	Output -	- 385 vol	ts.			

AIRZONE 1062AG

6 Valve A.C. Duat Wave



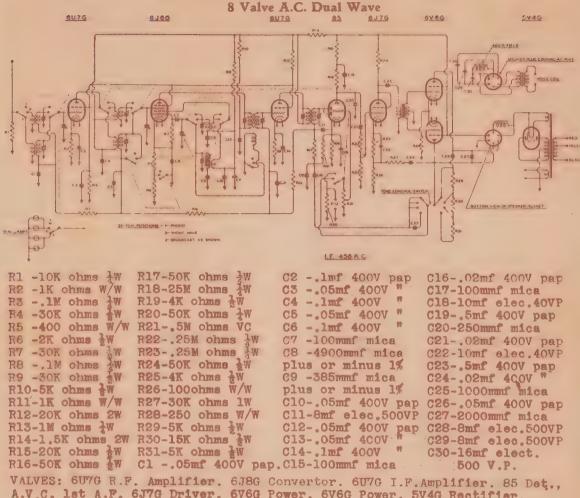
R1 -10K ohms W	R17-100 ohms W/W	C305mf 400V pap	C17-10mf elec.40VP
R2 -400 ohms W/W	R18-50K ohms W	C4 - 05mf 400V "	C18-,25mf 400V pap
R3 -30K ohms W	R195M ohma VC	C51mf 400V "	Cl905mf 400V pap.
R4 - 1M ohms W	R201M ohms WW	C6 -100mmf mica	C20-250mmf mica
R5 -400 ohms W/W	R21-50K ohms W	C7 -4900mmf mica	C2101mf 400V pap
R6 -2K ohms W	R2225M ohms \ \frac{1}{2}W	plus or minus 1%	C22-1000mmf mica
R7 -20K ohms 2W	R23-1M ohms 1W	C8 -385mmf mica	C2302mf 400V pap.
R8 -30K ohms &W	R2425M ohms &W	plus or minus 1%	C2402mf 400V "
R9 1M ohms AW	R25-20K ohma W	C9 05mf 400V pap	C25-10mf elec.40VP
R10-30K ohms www	R26-50K ohms \{W	Clo-8mf elec.500VP	C26-5000mmf mica
R11-5K ohms W	R275M ohms W	Cl105mf 400V pap	C27lmf 400V pap
R12-400 ohms W/W	R28-250 ohms W/W	C1205mf 400V pap	C28-16mf elec.Reg.
R13-1M ohms W	R29-10K ohms W	Cl3lmf 400V "	C29-8mf elec.500VP
R14-50K ohms W	R301M ohms &W	Cl4-l00mmf mica	C30- 5000mmf 400V
R1525M ohms 1W	C1 - 05mf 400V pap	.C15-100mmf mica	paper.
R16-2K ohms W	C2 lmf 400V "	C1602mf 400V pap	

VALVES: 6U7G R.F. Amplifier. 6J8G Convertor. 6U7G I.F. Amplifier. 6G8G - Det., A.V.C., let A.F. 6V6G Power. 5Y3G Rectifier.

	PL	ATE	SCR	EEN	OSC. PLATE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BIAS
607G	235	7.2	85	1.7		-4.0
6J8G	225	2.0	85	1.7	110	-3.3
607G	235	7.2	85	1.7		-4.0
6686	60	.55	20	.12		-1.3
6V6G	220	40.0	235	2.5	•	11.5
5Y3G	Output .	- 385 WOT	ta			

All measurements made with switch in short wave position and no signal.

AIRZONE 1082A



VALVES: 6U7G R.F. Amplifier. 6J8G Convertor. 6U7G I.F. Amplifier. 85 Det., A.V.C. lst A.F. 6J7G Driver. 6V6G Power. 6V6G Power. 5V4G Rectifier.

	PLI	ATE	SCRI	EEN	OSC. PLATE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BTAS
607G	235	7.5	85	1.7		9.5
6 J 8 G	225	1.5	85	1.7	110	3.5
607G	235	7.5	85	1.7		.9.5
85	120	2.5			,	7.5
6J7G	180	2.0				7.5
6V6G	270	35.0	277	1.4		18.0
5V4G	Output -	- 360 vol	ts.			

All measurements made with switch in short wave position and no signal.

5 Valve A.C. Dual Wave

RI	-10K ohms	1W	R9 -400 ohm	W/W	R1725M ohms ½W		-4900mmf mica plus
R2	-400 ohms	W/W	R10- 1M ohm	is tw	R185M ohms W		or minus 1%
R3	1M ohms	JW.	R11-30K ohn	is w	R19-460 ohms W/W	C5	-1000mmf mica
R4	-20K ohms	S.M	R12-50K ohm	18 JW	R20-5K ohms W	C6	-8mf elec.500VP
	-50K ohms	₹W.	R1325M oh	ms W	R21-15K ohms W		-5 plate ajd.pad.
R6	-10K ohma		R14-300 ohn	18 W/W	Cl05mf 400V pap	C8	lmf 400V paper
	-10K ohms		R155M ohn	s VC	C2 lmf 400V Pap		05mf 400V paper
	-5K ohms		R16-50K ohn	W en	C3 -50mmf mica	Cl	0lmf 400V paper

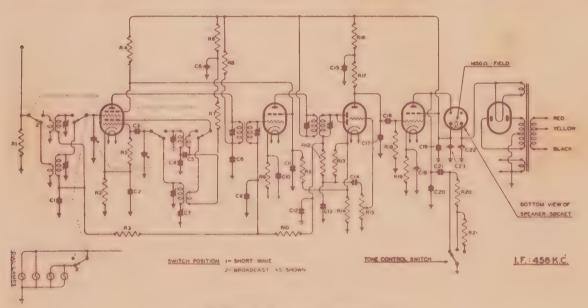
AIRZONE 1152A (Continued)

Cll-.05mf 400V pap. Cl5- .25mf 400V C17-250mmf mica C21-.05mf 400V pap C12-100mmf mica C18-.1mf 400V pap. C22-8mf elec. paper C19-1Cmf elec.40VP Cl3-100mmf mica C16-.02mf 400V 500VP C23-15mf elec. Reg. C14-.02mf 400V pap. paper C20-5000mmf mica VALVES: 6A8G Convertor. 6U7G I.F.Amplifier. 6B6G Det., A.V.C., 1st A.F.

6F6G Power. 5Y3G Rectifier.

	PLATE		SCREEN		OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A8G	230	2.8	85	4.5	140	-5.1
6U7G	245	6.5	85	1.5		-3.5
6B6G	82	.55				8
6F6G	230	30.0	245	5.0		-16.5
EVEA	Autmit .	- 355 TAT	r a			

All measurements to be made with switch in short wave position and no signal 686G 6F6G 5Y3G 6A8G 6U7G



	5 Valve Dual wave vibrator							
Rl -10K ohms W	R16-50K ohms 1W	C7 -385mmf mica	C2105mf 400V paper					
R2 -50K ohms IW	R1725M ohms \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	plus or minus 1%	C22-250mmf mica					
R3 -50K ohms W	R185M ohms \(\frac{1}{4}\text{W}\)	C8 -1000mmf mica	C2301mf 400V pap					
$R41M$ ohms $\frac{1}{4}W$	R1925M ohms 1W	C9 -8mf elec.350VP	C24lmf 400V pap					
R5 -5K ohms W	R20-30K ohms W	Clo05mf 400V pap	C25O2mf mlca 1500VT					
R6 -5K ohms W	R21-10K ohms W	Cll05mf 400V "	C26-8ml elec.500VP					
$R7 - 5K$ ohms $\frac{1}{2}W$	R22-200 ohms &W	C1205mf 400V "	C27-8rd elec.500VP					
R8 1M ohms ½W	R23-200 ohms ½W	C131Mf 400V "	C28-,25mf 200V paper					
R9 -1M ohms \(\frac{1}{4}\text{W}\)	Cl 05mf 400V pap	C1425mf 400V "	02925mf 200V paper					
R10-lM ohms W	C2 1mf 400V "	C15-100mmf mica	C30Olmf mica					
Rll5M ohms W	C3 -10mf elec.40VP	C16-250mmf mica						
R12-1M ohms WW	C4 -100mmf mica	C17-100mmf mica						
R13-1M ohms 1W	C5 05mf 400V pap	C1801mf 400V pap						
R145M ohms VC	C6 -4900mmf mica	Cl9-2000mmf mica						
	plus or minus 1%	C20-500mf elec.12VP						

VALVES: 107G Convertor. 1M5G 1st I.F. Amplifier. 1N5G 2nd I.F. Amplifier. 1K7G Det. A.V.C., 1st A.F. 1L5G Power.

AIRZONE 1252V (Continued)

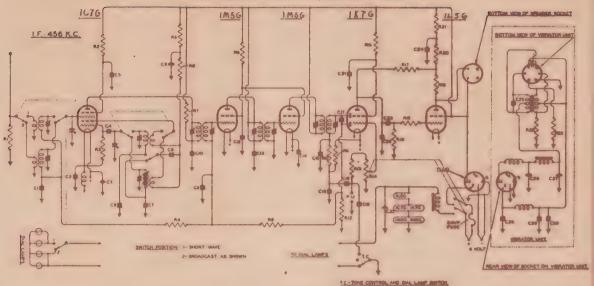


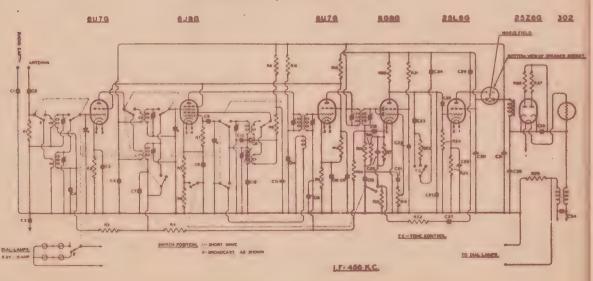
	PLATE		SCREEN		OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1C7G	127	1.25	53	1.6	95	-2
1M5G	135	1.25	45	.4		0
1M5G	135	1.25	45	.4		0
1.K7G	55	.25	40	.1		-2
1L5G	130	7.5	135	1.6		-4

Total "B" current drain 18.5 m.a. Total battery drain-without dial lamps - 1.1 amp.

A 1 measurements taken with switch in short wave position and no signal tuned. NOTE: Bias measurements for any valve are taken between that valves negative filament and the point on the series filament system to which its own grid return is connected.

AIRZONE 1262U

6 Valve A.C./D.C. Dual Wave



AIRZONE 1262U (Continued)

R1 -10K ohms W	R18-100 ohms W/W	C51mf 400V pap.	C20-l0mf elec.40VP
R2 -500 ohms W/W	R195M ohms VC	C61mf 400V pap	C2102mf 400V pap
R3 1M ohms \dag{4}W	R2025M ohms &W	C705mf 400V "	C22C3mf 400V "
R41M ohms W	R21-1M ohms W	C8 lmf 400V. "	C2301mf 400V "
R5 -400 ohms W/W	R22-50K ohms W	C9 -100mmf mica	C2401mf 400V "
R6 -850 ohms W/W	R23-50K ohms W	ClO-4900mmf mica	C25-250mmf mica
R7 -30K ohms W	R245M ohms W	plus or minus 1%	C2602mf 400V pap
R8 -5K ohms W	R25-150 ohms W/W	CllOlmf 400V pap	C2701mf 400V "
R9 -10K ohma W	R26-100 ohms 3W	Cl2-385mmf mica	C28-10mf elec.40VP
R10-5K ohms W	plus or minus 5%	plus or minus 1%	C2902mf 400V pap
R11-400 ohms W/W	R27-100 ohms 3W	Cl3-8mf elec.525VP	C30-8mf elec.500VP
R12-30K ohms W	plus or minus 5%	C1405mf 400V pap	C31-8mf elec.500VP
R13-5% ohms W	R28-45 ohms W/W	C1505mf 400V pap	C32-8mf elec.500VP
R14-1M ohms \(\frac{1}{4}\text{W}\)	Cl -5000mmf mica	Cl6lmf 400V pap	C33Olmf mica
R15-50K ohms www	C2 -5000mmf mica	C175mf 400V pap	C3401mf
R1625M ohms 1W	C308mf 600V pap	C18-100mmf mica	
R17-2K ohms W	.C405mf 400V "	C19-100mmf mica	

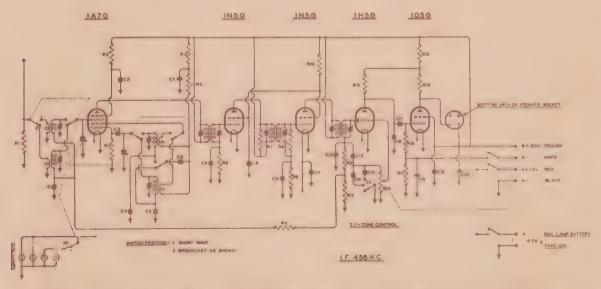
VALVES: 6U7G R.F. Amplifier. 6J8G Convertor. 6U7G T.F. Amplifier. 6G8G - Det., A.V.C., 1st A.F. 25L6G Power. 25Z6G Rectifier.

	PL/	ATE	SCI	REFIN	OSC. ANODE	4
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
607G	196	5.2	72	1.2		-3.25
6J8G	192	.8	72	1.25	120	-3.0
607G	196	5.0	72	1.1		-3.5
6G8G	25	.35	15	.1		9
25L6G	85	40.0	100	4.5		-7.0
25760	Output -	- 225 Vol	ts			

All measurements made with switch in short wave position and no signal. The figures shown are measured when the mains voltage is 240 volts A.C. The heater current for all valves is automatically controlled by the ballast valve and no adjustment to the receiver is necessary to suit various supply voltages.

AIRZONE 1352D

5 Valve Dual Wave 1.4 Volt



VALVES: 1A7G Convertor. 1N5G I.F. Amplifier. 1N5G I.F. Amplifier. 1H5G Det., A.V.C., let A.F. 1Q5G Power.

AIRZONE 1352D (Continued)

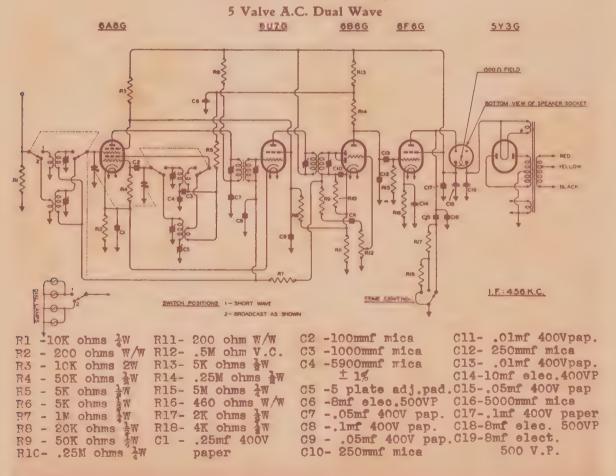
```
R1 -10k ohms }W
                          R12- .5M ohms 1W
                                                         C4 -3900mmf mica
                                                                                      Cl3-.01mf 400V pap.
R2 -50K ohms W
                          R13-.1M ohms 1W
                                                         plus/or minus 1%
                                                                                      Cl4-1000mmf mica
                                                                                      C15-4000mmf mica
R3 -.25M ohms W R14-.5M ohms VC
                                                         C5 -385mmf mica
R4 -5K ohms W
                          R15-.5M ohms &W
                                                         plus or minus 1%
                                                                                      C16-250mmf mica
R5 -5K ohms W
                          R16-1M ohms 1W
R17-600 ohms W/W
                                                         C6 -1000mmf mica
                                                                                      C17-.01mf 400V pap
                                                        C7 -8mf elec.350VP C18-25mf elec.40VP C8 -.05mf 200V pap C19-.1mf 400V pap C9 -.05mf 400V " C20-8mf elec.350VP C10-.05mf 200V " C11-.25mf 400V "
R6 -2M ohms W
R7 -.1M ohms \(\frac{1}{4}\text{W}\)
R8 -.1M ohms \(\frac{1}{4}\text{W}\)
R9 -2M ohms \(\frac{1}{4}\text{W}\)
                          R18-50K ohms W
                         R19-.25M ohms 1W
C1 -.05mf 200V pap
C2 -.05mf 400V "
R10-50K ohms W
R11-1M ohms 1W
                          C3 -100mmf mica
                                                         C12-100mmf mica
```

	PLATE		SCI	REEN	OSC. ANODE		
VALVE	E VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS	
1A7G	83	.35	30	.85	67	0	
1N5G	85	.65	60	.15		0	
1N5G	83	.65	60	.15		0	
1H5G	35	.05				0	
1Q5G	80	6.0	83	.8		-7	
1 "B"	Battery d	rain, no	signal -	11 M.A.		•	

Total "B" Battery drain, no signal - Total "A" Battery drain - .3 amp.

All measurements taken with switch in short wave position and no signal, and with respect to chassis.

AIRZONE 6552A



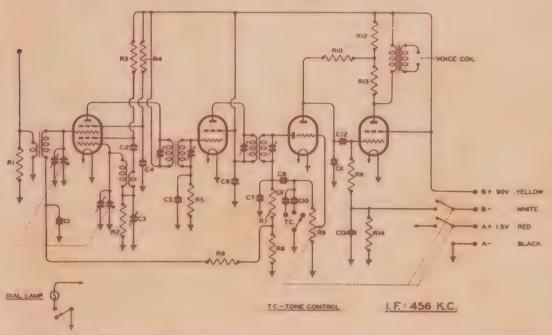
AIRZONE 6552A (Continued)

	PLA	TE	SCI	REEN	OSC .ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A8G	190	3.5 ma	95	4.5 ma	150	-4.25
607G	210	6.7 "	95	1.5 "		-4.25
6B60	75	.2 n°				-1.1
6F6G	200	23.0 *	210	4.0		-13.0
5730	Output	-290 VO	lta			

VALVES: 6A8G Converter. 6U7G I.F. Amp. 6B6G Det. AVC 1st A.F. 6F6G - Power. 5Y3G Rectifier.

All measurements made with switch in short wave position and no signal tuned in.

AIRZONE 405

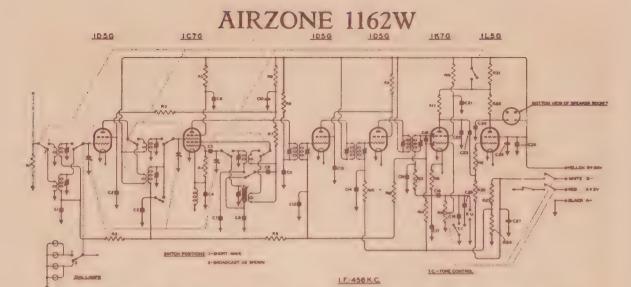


Rl	-lok ohms 1W	R8 liu ohms w	Cl	05mf 200V pap	C80lmf 400V pap
		R95M ohms VC			C9 -4000mmf 400V 1
R3	-lok ohms W	R105M ohms		-5 plate adj.pad	
R4	-50K ohms W	R115M ohms W		05mf 400V pap	
R5	-2M ohms \W	R12-50K ohms W			C120lmf 400V pap
R6	-lM ohms W	R1325M ohms		5mf 400V pap	
R7	5M ohms W	R14-500 ohms W/W	C7	700	40V .P.

	PL	ATE	SCI	REEN	030	.ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID	VOLTAGE	BIAS
1A7G	83	.5 ma	38	.83 m	8.	70	0
1N5G	83	68 ma	83	.18 "			0
1H50	32	.05 ma					0
1950	80	5,5 ma	83	.8 ma			6.5

Total "B" Battery drain, no signal - 10 ma. Total "A" - .25 amp. In earlier releases using a 1050 in lieu of the 1250 shown and the limiting resis.R5 together with its by-pass cond.C5, was not used in the grid circuit of the 1N50. VALVES: 1A70 Convt. 1N50 I.F.Amp.1H50 det.audio 1250 Power Amp.

37



R4 -50K ohms W R18-11 R5 -50K ohms W R19-5 R6 -5K ohms W R20-1 R7 -5K ohms W R21-3 R81M ohms W R22 R9 -5K ohms W R23-1 R101M ohms W R24-1	25M ohms www. M ohms www. M ohms www. M ohms www. OK ohms www. Sh ohms www. 30 ohms www. So ohms www. Ofmf 400V pap.	C7 -4900mmf mica plus or minus 1% C8 -385mmf mica plus or minus 1% C9 -1000mmf mica C10-8mf elec.350VI C1105mf 400V par C1205mf 400V "	C230lmf 400V paper C24-2000mmf mica C25lmf 400V pap C26-&mf elect.
R101M ohms W R24-1 R111M ohms W C1 R12-1M ohms W C2 R131M ohms W C3	80 ohms W/W	C1205mf 400V "	C26-anf elect. 350VP

	PL	ATE .	SCI	REEN	OSC.ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1D5GP	130	2.4 ma	67	1.0 ma		-3.2 (RF Amp.)
107G	120	2.2 *	42	1.6 *	90	-3.2
1D5GP	130	1.0 *	47	•3 ^{,#}		-3.2 (lst IF)
1D5GP	130	1.0 *	47	.3 *		-3.2 (2nd IF)
1K7G	40	.3 *	20	.1 *		0
1L5G	128	4.0 *	130	1.0 "		5.6

Total B Battery drain with no signal 17 M.A. Total "A" without dial lamps .66 amp. VALVES: 1D5GP RF Amp. 1C7G Converter. 1D5GP lst IF Amp. 1D5GP 2nd IF amp. 1K7G det. AVC. 1st AF. 1L5G Power. All measurements made with switch in short wave position and no signal tuned in, so that A.V.C. will not function and affect operating voltages and currents. All voltages are with respect to chassis

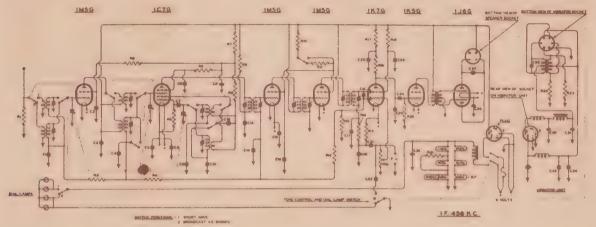
AIRZONE 1072V

R1 -10K ohms W	R8 -51 obms W	R155M ohms W	R22-200 ohms } Watt
R2 1M ohms W	R9 -5K ms &W		R23-200 ohms & Watt
R3 -50K ohms W	R1025m ohms aw	R17-10K ohms	Cl C5mf 400V paper
R4 lM ohms W	R1125M ohms W	R1825M ohms 20	C205mf 400V paper
R5 -50K ohms W	R12-1M ohms W	R19-1K ohms W	C3lmf 400V paper
R6 -50K ohms W	Rl3-lM ohms in	R205M ohms AW	C4 O5mf 400V paper
R7 -5K ohms aw	R14- 1M ohms W	R21-16.5 ohms W/W	C5lmf 400V paper

AIRZONE 1072V (Continued)

C6 -.lmf 400V pap
C7 -l00mmf mica
C8 -.C5mf 400V pap
C12-1000mmf mica
C8 -.C5mf 400V pap
C14-.O5mf 400V pap
C22-2000mmf mica
C9 -3900mmf mica
C15-.lmf 400V pap
C23-.05mf 400V pap
C16-.lmf 400V pap
C23-.05mf 400V pap
C16-.05mf 400V pap
C16-.05mf 400V pap
C10-385mmf mica
C17-250mmf mica
C25-250mmf mica
C18-250mmf mica
C26-1000mf elec.12VP
C11-2mf elec.350VP C19-100mmf mica
C27-2000mmf mica

C28-100mf elec.12VP C29-.02mf mica 1500VT C30-8mf elec.500VP C31-8mf elec. " " C32-.25mf 400V pap C33-.25mf 400V pap C34-.01mf mica 1500 V.T.



	PL	TE	SCI	reen	OSC .ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1M5G'	137	2.6 ma	65	.85 ma		0
107G	130	85 ma	45	1.4 ma	90	-2
3M 5G	137	.7 ma	30	.22 ma		O (lst IF)
1M5G	137	.7 ma	50	.22 ma		0 (2nd IF)
1K7G	45	.25 ma	30	.l ma		-2
1K5G	132	3.5 ma				-4
1J6G	135	1.0 ma				-4
T000	135	1.0 ma				-4

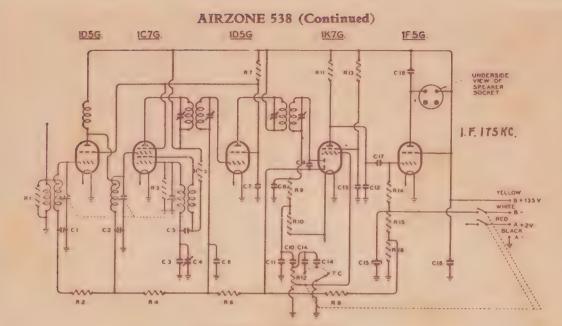
Total *B* Current drain with no signal 16 m.a. Total *A* current drain, without pilot lamps 1.15 amp.

All measurements taken with switch in short wave position and no signal tuned in, so that AVC will not function and affect operating voltages and currents - all voltages with respect to chassis.

NOTE: Bias measurements for any valve are taken between that valve's negative filament and the point on the series filament system to which its own grid return is connected.

AIRZONE 538

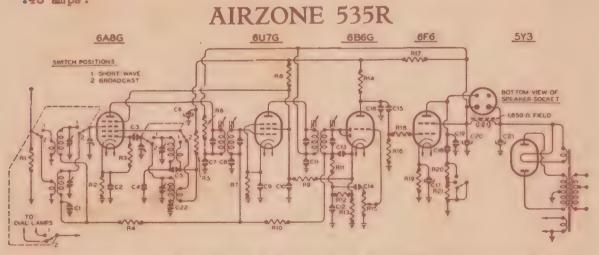
C18-2000mmf mica C3 -750mmf mica R1 -10K ohms W R10-.5M ohms W Clo-.0lmf 400V pap R2 -. 1M ohms R11-.25M ohms W plus or minus 3% Cll-10 Ommf mica R3 - . 1M ohms R4 - " " R12-.5M ohms VC C4 -3 plate adj. Cl2-250mmf mica R13-1M ohms pad . Cl3-.05mf 400V pap. R5 -50K ohms R14-.5M ohms W C5-4000mmf mica Cl4-.001 plus .004 R6 - .5M ohms W R15-200 ohms W/W C6 -. 05mf 400V pap 400V paper R7 -50K ohms W C7 - .05mf 400V " C15-25mf 25V elec. R16-200 ohms W/W Cl -.05mf 400V pap C8 -loommf mica C2 -.05mf 400V pap C9 -loommf mica R8 -1M ohms 1W C16-.5mf 400V pap R9 -50K ohms W C17-.Olmf 400V pap



MC	TOP	PRIN	25	CITE	RENTS	1
- V U		TO PLICE	OL:	COL	A COLUMN	

VALVE	EP.	IP.	ESG.	ISG.	BOP.	IOP.	ECG.
1D5G	129.5	.8	40	.25	-	-	-2.7
1079	129.5	.35	40	1.0	60	1.3	-2.7
1D5G	129.5	.8	40	.25	-	m .	-2.7
1K7G	40	-3	20	.1	-	-	0
1F5G	125	5.7	129.5	1.9	-	m. m =	-5.5
							0

Total "B" Battery drain, no signal - 13 ma. Total "A" Battery drain - .48 amps.



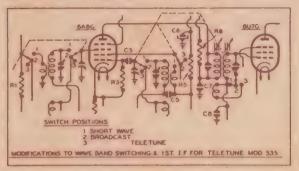
For Modifications to Wave Band Switching and 1st I.F. for Teletune Model 535 see next page.

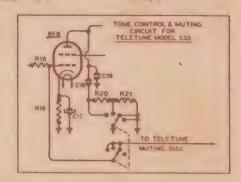
R1 -10K ohms 4W	R5 -5K ohms W	R9- 20K ohms W	R13-200 ohms W/W
R2 -400 ohms W/W	R6 -5K ohms W	Rlo- lm ohms www	R1425% ohms W
R3 -50K ohms W	R7 -500 ohms W/W	R11- 50K ohms 1W	R155M ohma V.C.
R4 lin ohms w		R1225M ohms W	

AIRZONE 533R (Continued)

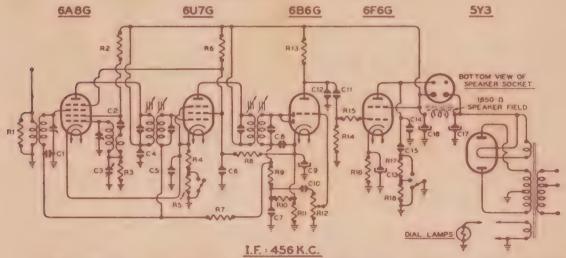
R17-5K ohms lW C3 -loommf mica R18-50K ohms 1W C4 -3900mmf mica R19-460 ohms W/W R20-5K ohms W plus or minus 1% C5 -1000mmf mica R21-15K ohms W C1 -.05mf 400V pap.C6 -8mf elec.500VP C12-100mmf mica C18-.05mf 400V pap.C19-5000mmf mica C20-16mf elec. C21-8mf elec.500V.P.C22-Adj.pad.6Pl.

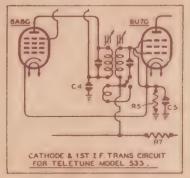
C2 -. lmf 400V pap C7 -. lmf 400V pap C13-100mmf mica C8 -.05mf 400V pap C14-.01mf 400V C9 -.lmf 400V pap paper Cl0-.05mf 400V pap Cl5-.0lmf 400V Cll-.lmf 400V pap paper C16-250mmf mica C17-10mf elec.25 500V .P. V.W.

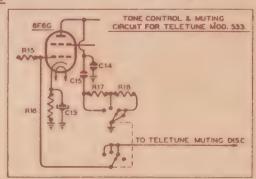




AIRZONE 533R







R1 -10K ohms W R4 -200 ohms W/W R7 -1M ohms W 制 R5 -300 ohms W/W R8 -20K ohms W R2 -30K ohms R3 -50K ohms R6 -15K ohms 2W R9 -50K ohms W

R10- .25% ohms 1W R11- 200 ohms W/Wnd. R12-.5% ohms V.C.

AIRZONE 535R (Continued)

R13-.25M ohms awatt
R14-.5M ohms awatt
R15- 50K ohms awatt
R16- 460 ohms wire
Wound
R17-5K ohms awatt
R18-15K ohms awatt
C1 -.lmf 400V paper
C16-16mf elec. 500V.P.

C2 -loommf mica
C3 - Adj. Padder
6 plate
C4 -.lmf 400V paper
C5 -.25mf 400V paper
C6 -.05mf 400V paper
C7 -loommf mica
C8 -loommf mica

C9 -lomf elec.25v.w. Clo-.olmf 400v paper Cll-.olmf 400v paper Cl2-250mmf mica Cl3-lomf elect. 25 v.w. Cl4-5000mmf mica Cl5-.05mf 400v paper

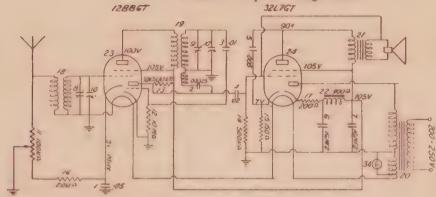
MEMORANDA

C17-8mf elec. 500V.P.

ASTOR RADIO

Manufactured by Radio Corporation Pty. Ltd., South Melbourne, SC.4.

2 Valve A.C. Operated Midget Receiver



Broadcast Coverage - 1650 Ke to 540 Ke.
Voltages taken with 1000 ohm per volt meter.
LIME VOLTAGE: The Powersupply of this receiver is so designed that no adjustment is necessary for mains voltages between 200V and 260V.

1. .05mf pap.Con. 200V

.00025mfd mica Cond. 1000V

.01mfd pap.

.02mfd pap.

5. .005mfd pap. Con. 600V

6. 16mfd elec. con. EEC916 350VP 7. 16mfd elec

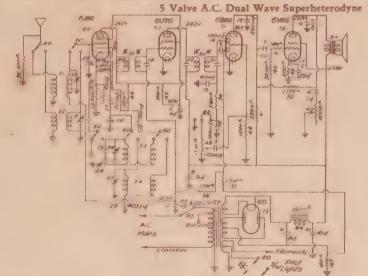
con.ET1043 350VP 11. 100,000 ohm Vol.Control

12. 10 meg.Res.lW 13.500,000 ohm Res. & Watt 14. 500,000 ohm Res. & Watt

Res. 3 Watt 15. 150 ohm &W 16. 200 ohm AW

17. 200 ohm W/W

- MANTEL NS(354 and 654 C.I



22. .00005mf mica Con. 1000V

B/cast series Pad. 25. 20mmf W/W Cond.

26. B/Cast Osc. trim. 27. S/W Osc. trim. 28. .0031 Pad. S/W 29. 2 gang condenser 30. Ceramic trim. B/C

31. Ceramic trim. S/W

33. 400 ohm Carbon Resistor W

50,000 ohm 39. 1.75 megohm Carbon Resistoraw 10000 ohm Car-40. 50000 ohm 35.

bon Resistor 1W 36. 50000 ohm 41.

carbon resistor W Carbon resis 3W 42. 500000 ohm Carbon resistor W Carbon resis. 3W

1. .05mf paper Con.200V 2. .05mf .lmf paper Con. 400V .lmf paper Con. 600V .004mf pap. Con. 600V

.002mf .02mf pap.con. 400V

.5mf pap.Con. 400V 25mf elec.Con.ET718 40 VP

16mf elec. Cond. EEC973 525VP 10.

11. 8mf elec. Cond. EE0849 525VP

13. .001 mica Con.1000V 14. .0001 - 99

15. .0001 16. .0001 99 17. .00005 * 18. .00025mf mica Con.

1000V .00005mf mica con. 1000V

20. .000lmf mica Cond. 1000V

.0001mf mica Cond. 1000V

43. 500 ohm Carbon Res. 44. 20000 ohm Carbon

Resistor 1 Watt 45. 30000 ohm Carbon

Resistor 1 Watt 46. 10 meg.Carbon Res." 47. 40 ohm W/W Res. 3W

100000 ohm Tone 48. Control
49. meg. Volume Con.

INTERMEDIATE FREQ: 455 Kc. Broadcast Coverage: 1650 Kc. to 540 Kc. Short Wave Coverage: 22.25 mc. to 6.8 mc. All voltages taken with 1000 ohm per volt meter. No signal.

38. 1.75 megohm

Carbon resis. aw

Carbon resis. lw

Carbon Resis 3W

250000 ohm

ASTOR 364A & 664A C.M. & C.M.R.

MANTEL & CONSOLE

6 Valve A.C. Dual Wave Superheterodyne Receiver

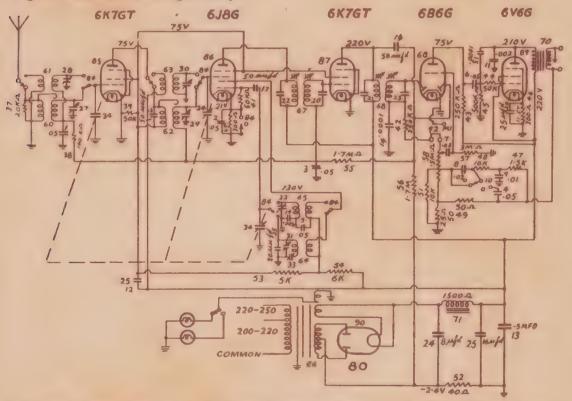
These models are designed for operation from 200V to 250V. 40-60 cycle A-C Electric supply mains..

ACCOUSTINATOR. The Accoustinator control is incorporated in these models. This control gives three entirely different conditions of audio response and does not merely out the high notes as with an ordinary tone control. The three positions are as follows:-

1. VOICE. (Left hand position - anti-clockwise). In this position the bass notes are reduced, while the highs are accentuated slightly to give maximum intelligibility while listening to Plays, Talks, etc.

2. MUSIC. (Centre position). In the "music" position the high notes and low notes are accentuated progressively as the volume control is turned to lower volume. This makes the music clear and natural at very low volume levels.

3. OVERSEAS. (Right hand position). The effect in this position is two-fold. Firstly the extreme high notes are reduced to prevent excessive noise and interference, and secondly the extreme low notes are reduced to give maximum intelligibility.



- 1. .05mfd paper Cond .200V 7. .05mfd pap.Cond .400V 2. .05mfd " " 8. .03mfd pap. " 200V
- 3..05mfd " " 9..01mfd " " 600V
- 4. .05mfd " " " 10.
- 5. .05mfd " " 11..002mfd pap.Cond 6..05mfd " " 400V 600V
- 12. .25mfd paper con.
- 13. .5mfd pap.com. 400V
- 14. .000lmfd mica Con 1000V

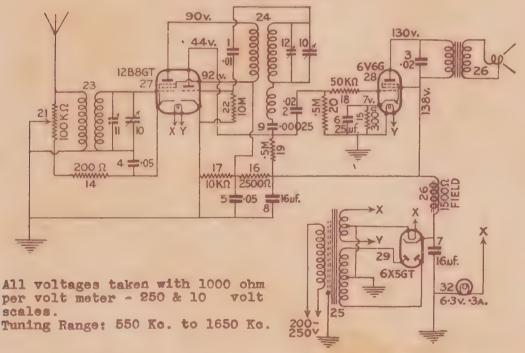
ASTOR 364A & 664A C.M. & C.M.R. (Continued)

150001mfd Mica Con.	230001mfd Silver	43. 250,000 ohm Res. W
1000V 1600005mfd mica	mica con. 1000V 24. 8mfd elec.Cond.	44. 50,000 ohm " " 45. 500,000 ohm " "
Con. 1000V 1700005mfd mica	type ET1015 525PV 25. 16mfd elec.con.	46. 300 ohm Res. ½W 47. 1,500 ohm Res. ½W
Con. 1000V 1800005mfd mica	type EEC973 525PV 26. 25mfd elec.con.	49. 50 ohm Res. \(\frac{1}{2}W \)
Con. 1000V 190031mfd mica	type ET718 40PV 34.3 Gang Tun.Cond.	50. 25 ohm Res. \(\frac{1}{2}\two \) 51. 10,000 ohm Res. \(\frac{1}{2}\two \)
Con. 1000V 2000005mfd Silver	35. 20mmfd Bifilar Condenser	52. 40 ohm Res. $\frac{1}{2}$ W 53. 5,000 ohm Res. 1W
mica cond.1000V 2100005mfd Silver	37. 20,000 ohm Res. 1W 38.100,000 " " "	54. 6,000 ohm " " 55. 1.7 meg. Res. \(\frac{1}{2}\text{W}\)
mica con. 1000V 220001mfd Silver	39. 50,000 " " " " 40. 300 ohm " "	55. 1.7 meg. Res. W 56. 1.7 meg. " " 57. 3 meg. Res. W
mica con. 1000V	41. 50,000 ohm " " 42.250,000 ohm " "	58. 500,000 ohm Vol- ume Control Tapped
	,	

INTERMEDIATE FREQUENCY - 455 Kc. Broadcast Coverage is from 1620 Kc. Short Wave Coverage is from 22.00 mc. to .7 mc. to 540 Kc. All voltages taken with 1000 ohms per volt meter. 250V & 10V scale. No signal.

ACTOR BR BABY

3 Valve TRF Midget Mantel A.C. Receiver

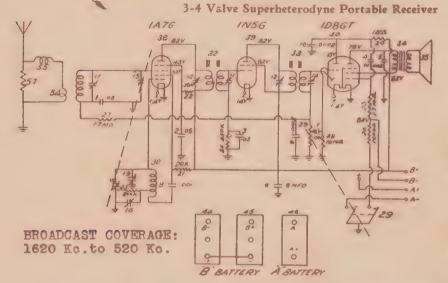


```
1. .Olmfd pap.Con. 600V
                           6.25mfd elec.Con.(ET718)40PV 17.10,000 ohm
                                          "(ET1048)525PV Carb.Res. 1 Wat
2. .02mfd pap.Con. 400V
                           7.16mfd
                                     - 22
3. .02mfd pap.Con. 400V
4. .05mfd pap.Con. 200V
                           8.16mfd
                                          "(EEC973) "
                                                           18.50,000 ohm
                           9..00025mfd mica Con.1000V
                                                              Carbon Res.
                           15.300 ohm Carb.Res. 1W
5. .05mfd pap.Con. 400V
14.200 ohm Carb.Res. W
                           16.2500 ohm Carb. Pes. 17
```

ASTOR BR BABY (Continued)

19. 500,000 chm Carb. 20. 500,000 chm 21.100,000 chm Volume Control Res. \(\frac{1}{2}\) Watt \(\text{Carb.Res.} \(\frac{1}{2}\) \(\text{22.10 megohm Carbon Res.} \(1 \) Watt 26. K5 Speaker 1500 ohm field 7000 ohm input LINE VOLTAGE: The power supply of this receiver is so designed that no adjustment is necessary for mains voltages between 200V and 260V. BROADCAST COVERAGE: 1650 Ke. to 540 Kc.





1. .05mf pap. Con. 200V 2. .05mf paper Con.200V .05mf paper Con. 200V .Olmf paper Con. 600V 5. .002mf paper Con.600V 6. 8mf dry elect. Con.RT1015 525PV 7. .001mf mica Con. 1000V 8... Oolmf mica Con. 1000V .0002mf mica Con. 1000V

10. .0002mf mica Cond. . 22. 40.000 ohm Res. W 1000V

20. 1 meg. Res. 3W 21. 20.000 ohm Res. & Watt

23. 200,000 ohm Res. Watt

24. 250.000 ohm Res. W 25. 1.7 meg.Res. W 57. 2000 ohm Res. W

26. 1000 ohm Res. W 27. 1.7 meg.Res. W

28. 10 meg.Res. 1W

29. 1 meg. Vol. Cont. DPST Switch

INTERMEDIATE FREQUENCY: 455 K.C. All voltages taken to earth with 1000 ohm per volt meter 250 and 10V scale. The batteries used are: ~ 2 - P45 or equivalent 45 volt "B" batteries. 1- P1.5 or equivalent 1.5 volt dry cell "A" battery.

ASTOR 554 B.L.

5 Valve Superheterodyne Console Receiver

1. .lmfd pap.con.400V 2. .lmfd pap.con.600V

3. .5mfd pap.con.400V

4. .02mfd pap.con.400V

.05mfd pap.con.200V

6. .002mfd pap.con. 600V

.004mfd pap.con. 600V

8. .001mfd mica cond. 1000V

9. .0001mfd mica Cond. 1000V

10..0001mfd mica Con. 1000V

11..0001mfd mica con.

1000V 12..00025mfd mica con. 1000V

13..00001mfd silver mica con. 1000V 14..000lmfd silver

mica con. 1000V 15..0001mfd silver mica con.1000V

16..00005mfd silver mica con. 1000V

17. .00005mfd silver mica con. 1000V 18. 8mfd elec.con.

EE0849 525VP

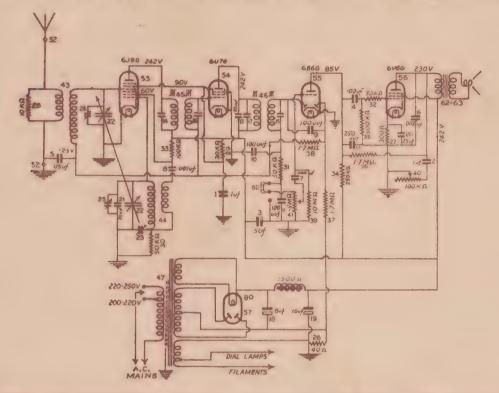
19. 16mfd elec.cond. (EEC973) 525VP 20.25mfd elect.Condens.

(ET718) 40VP

21. 20mmfd W/W Cond. 22. 2 gang var. cond. 26. 40 ohm W/W Res.3W

ASTOR 554 B.L. (Continued)

27. 300 ohm Res.lW 28. 10,000 ohm Res.lW 29. 30,000 ohm Res.lW 30. 50,000 ohm Res.lW 31. 50.000 ohm Res.lW 32. 50,000 ohm Res. W 37.1.75 meg.Res. Watt 33. 100,000 ohm Res. W 38.1.75 meg.Res. Watt 34. 250,000 ohm Res. W 39. 10 meg.Res. 1 Watt 35. 500,000 ohm Res. W 40.100,000 ohm Tone Con. 36. 1.75 meg.Res. W 41. .5 meg.Vol.Cont.



INTERMEDIATE FREQUENCY: 455 Kc. BROADCAST COVERAGE: 1620 to 540 Kc. This Receiver is designed for operation from 200V to 250V. 40-60 cycle

A.C. electric supply mains.

PHONO PICK-UP CONNECTIONS: An inspection of the back of the chassis will reveal three plug sockets under the marking "Phono Pick-up". When the receiver is used on Radio, the middle and left hand sockets under "R" are connected by means of the Pick-up shorting bar. To connect the Phono Pick-up, remove the shorting bar and connect the pick-up leads to the middle and right hand sockets under "P".

If a single shielded lead is used from the pick-up, connect the lead to the centre socket and the shielding braid to the right hand socket. If it so happens that two leads are used on the pick-up, connect the active lead to the centre socket, the earth lead to the right hand socket and the shielding braid, if any, to the chassis earth. The volume control and tone control both control the reproduction on Phono pick-up in exactly the same manner as on Radio.

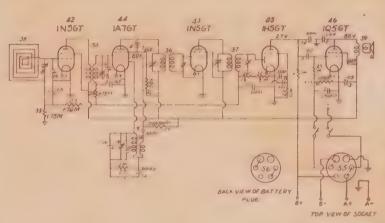
ASTOR "DE LUXE" PORTABLE CJ

5 Valve Superheterodyne Portable Receiver

INSTRUCTIONS FOR CHANGING DIAL READINGS:- 1. Remove Fush-on tuning knob by pulling straight out. 2. Remove two screws holding Escutcheon ring. 3. Remove Escutcheon, Celluloid. and Dial Reading. 4. Select desired State Dial reading. 5. Place screws into Escutcheon, then place

ASTOR "DE LUXE" PORTABLE CJ (Continued)

Celluloid on screws at the back, then the Dial reading with lettering towards the Celluloid. 6. Place Escutcheon, Celluloid, and Dial Reading assembly into position making sure that the top side of the is toward the top of the cabinet. 7. Tighten down screws, holding parts into position. 8. Replace tuning knob. The spring in the known must correspond to the flat on the shaft. Push in as far as possible. 9. The receiver is now ready to operate and the pointer on the will indicate the station to which the set is tuned.



- 1. .05mfd pap.Con.200V 2. .05mfd pap.Con.200V 3. .05mfd pap.con.200V 4. .lmfd pap.con.200V 5. .O2mfd pap.con.400V 6. .004mfd pap.con.600V 7. 25mfd elec.Cond. (ET718) 40VP
- 9. .0001mfd mica Cond. 1000V
- 10..0001mfd mica Cond. 1000V
- 11..0001mfd mica Cond. 1000V
- 12..000lmfd mica Cond. 1000V

- 13. .001mfd mica Cond. 1000V
- 14. .00125mfd mica Con. (s. Pad) 1000V
- 16. 3 gang tun. Cond. 24. 1.75 meg.Carbon
- Res. & Watt
- 26. 500,000 ohm Carb. Res. 3 Watt

- 20. 15mmfd Bifilar Con.
- 22. 10meg.Carb.Resis. 1 Watt
- 23. 1.75 meg. Carbon Res. & Watt
- 1 meg.Carb.Res.
- Watt 200,000 ohm Carb.
- 28. 200,000 ohm Carbon Res. & Watt
- 29. 20.000 ohm Carbon Res. & Watt
- 30. 50,000 ohm Carbon Res. & Watt
- 31. 500 ohm Carb. Res. 2 Watt
- 33. 1.75 meg.Res. W
- BROADCAST COVERAGE: 1600 Kc. to 540. INTERMEDIATE FREQUENCY: 173 K.C.

MEMORANDA

A MESSAGE TO RADIO DEALERS & SERVICE MEN



DAY by day it is becoming more evident that Radio is an Essential Service to the community and it is up to you Radio Dealers and Service Men to keep all radio sets in sound working order.

Crown Radio Products have for years enjoyed an unparalleled nation-wide reputation for efficiency and reliability due to strict attention to design and production details, and have for years given you a reliable line of standardised replacement parts. In spite of difficult conditions Crown Radio are doing all within their power to maintain constant supplies of components to you.

Please direct all enquiries for Crown Radio Components to any of our Authorised Distributors, who will give you every possible assistance in regard to all technical problems.

THE AUSTRALIAN OFFICIAL



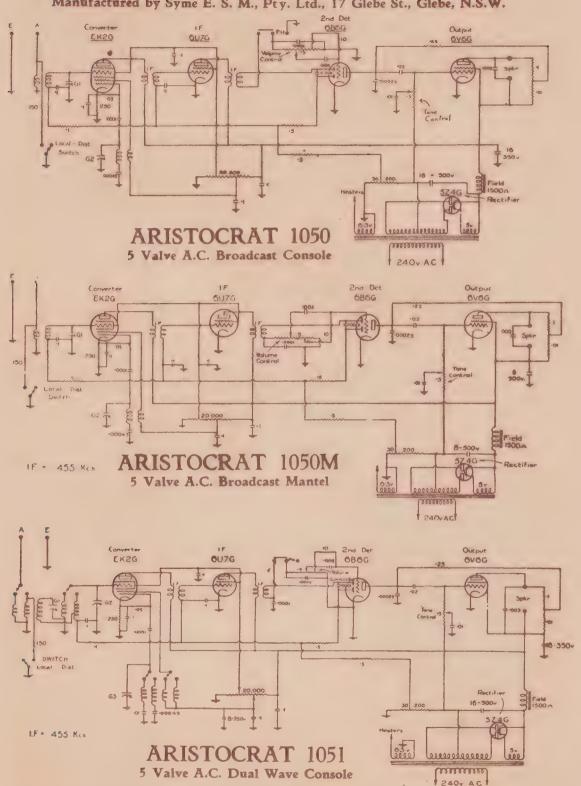
RADIO SERVICE MANUAL

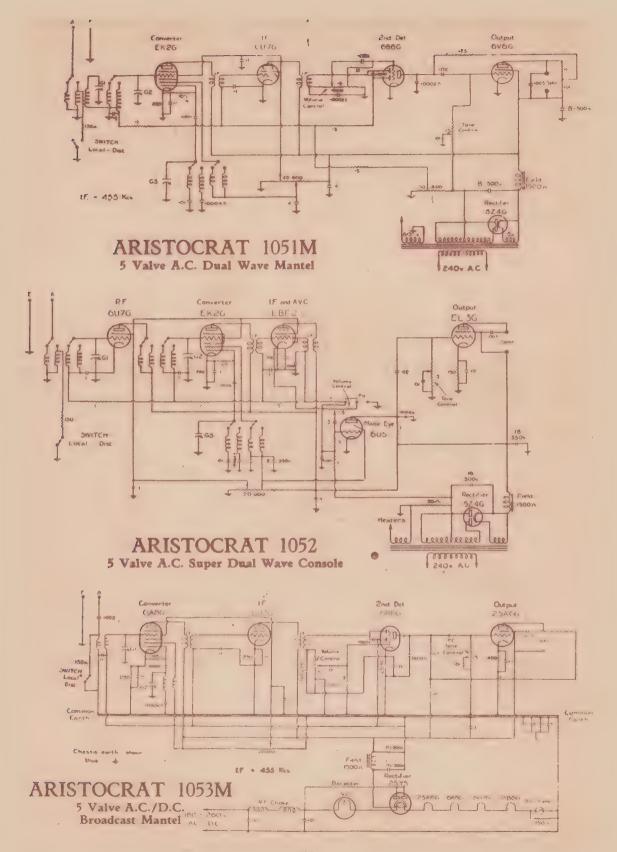
The Australian Official Radio Service Manual is Australia's only book of standard receiver circuits and data covering each year's models. There is no other way of securing complete year by year reference of every national receiver.

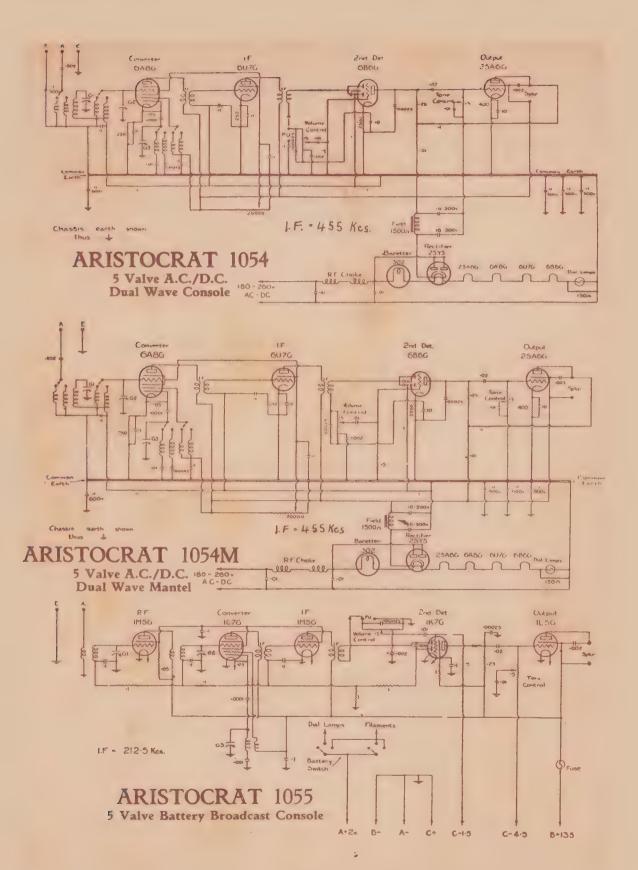
It enables you to refer to national receiver circuits from 1937 to 1941 at a moment's notice. No guesswork, no calculations—there before you is the manufacturers' circuit and data.

ARISTOCRAT RADIO

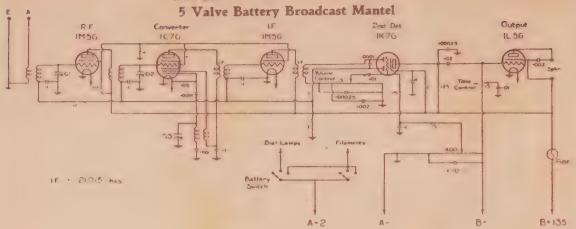
Manufactured by Syme E. S. M., Pty. Ltd., 17 Glebe St., Glebe, N.S.W.



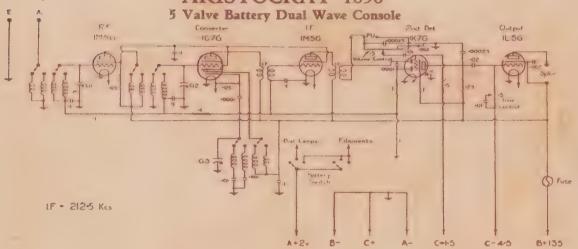




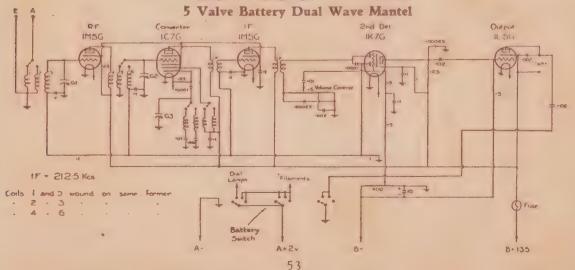
ARISTOCRAT 1055M

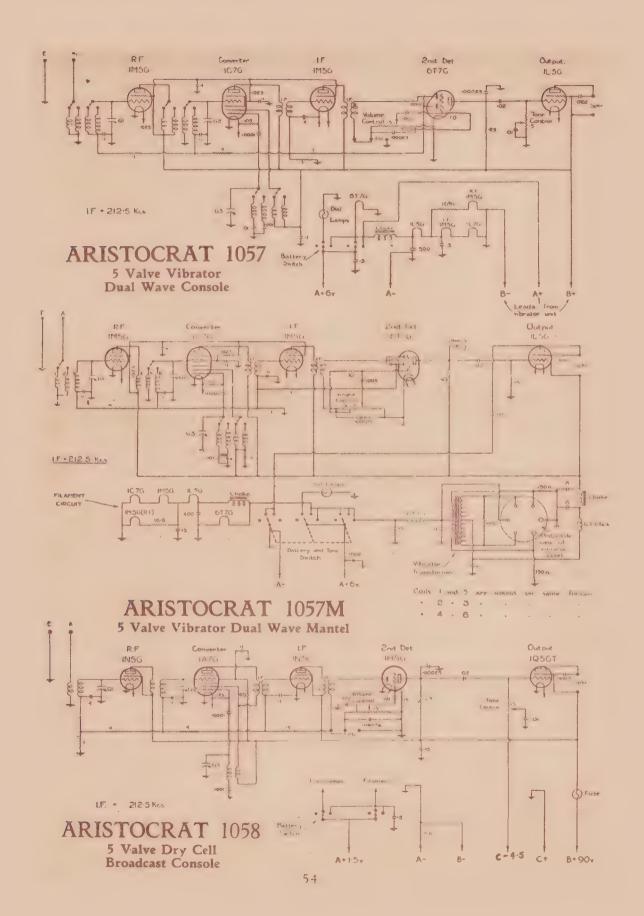


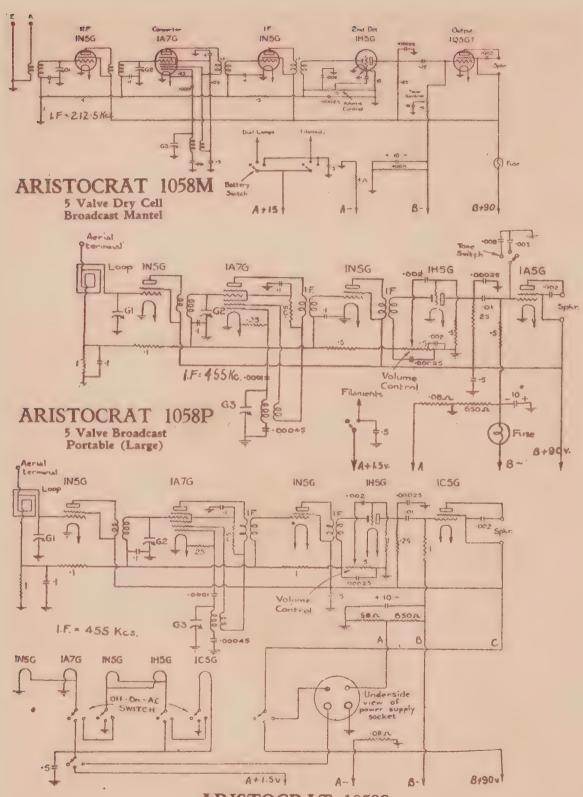
ARISTOCRAT 1056



ARISTOCRAT 1056M

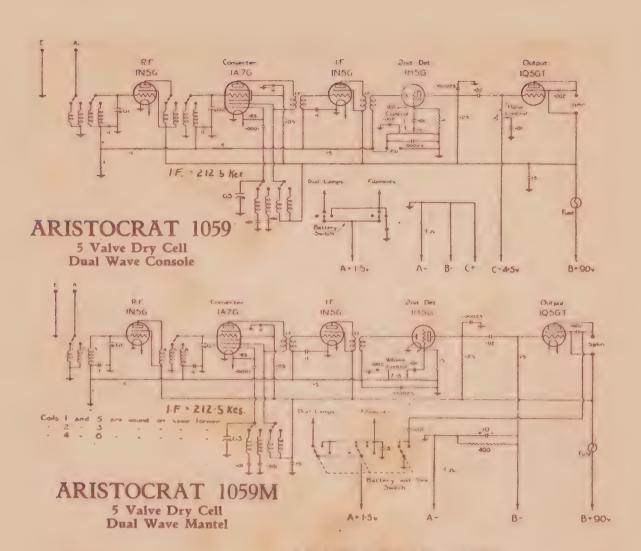


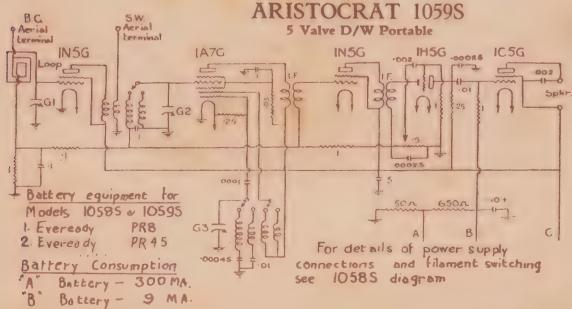


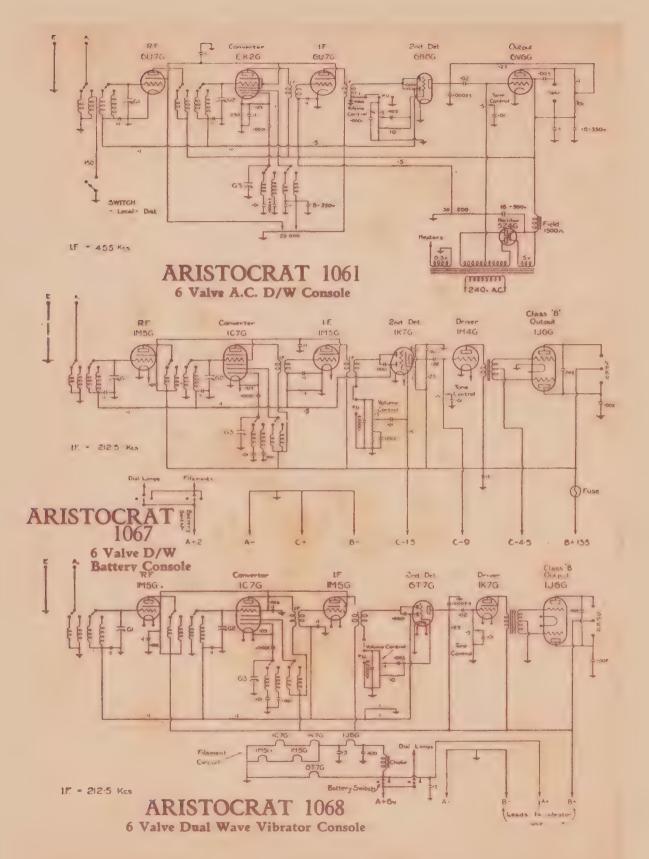


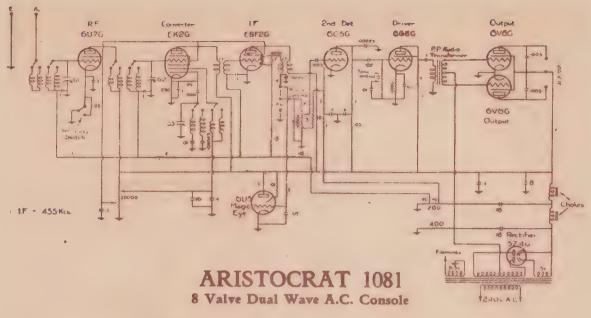
ARISTOCRAT 1058S

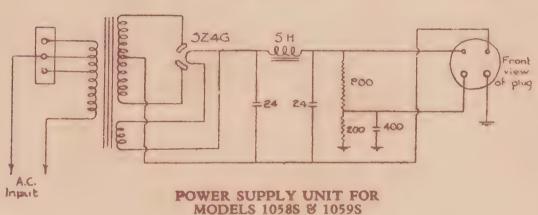
5 Valve B/C Portable

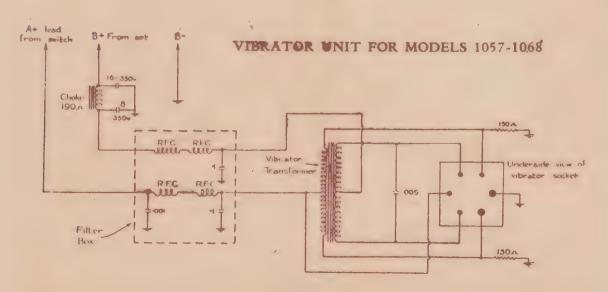


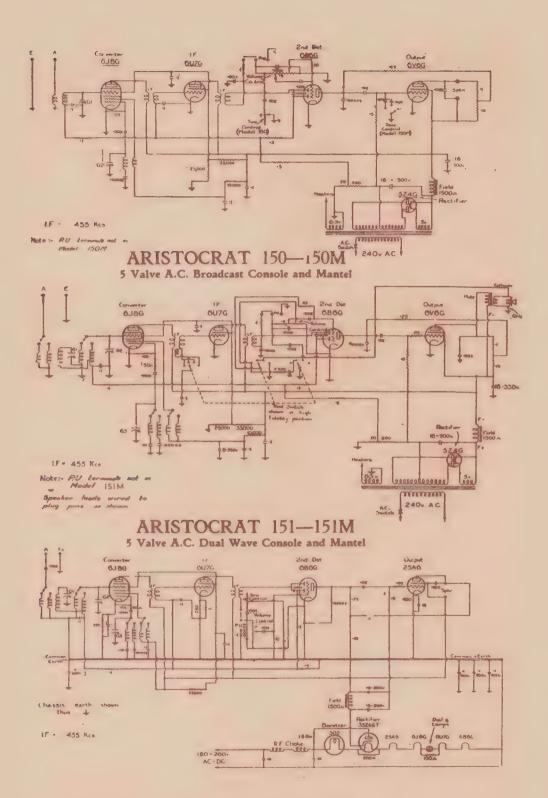




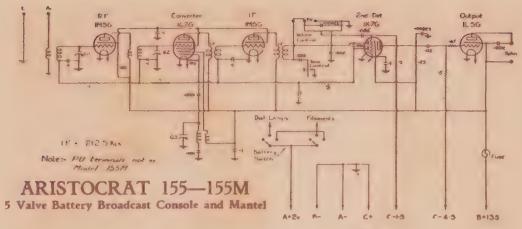


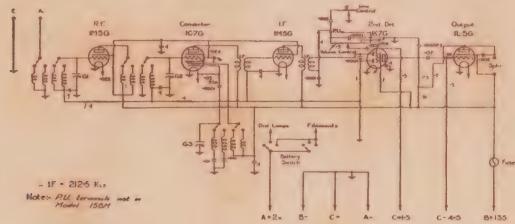






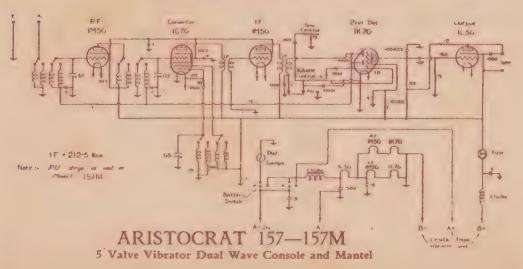
ARISTOCRAT 154
5 Valve A.C./D.C. Dual Wave Console

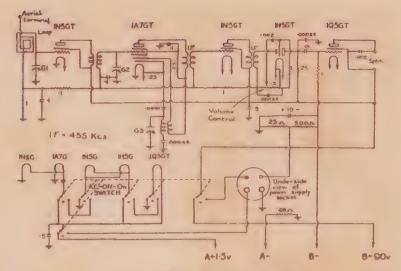




ARISTOCRAT 156—156M

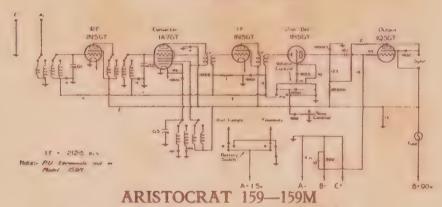
5 Valve Battery Dual Wave Console and Mantel



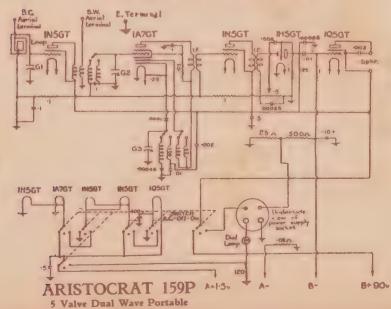


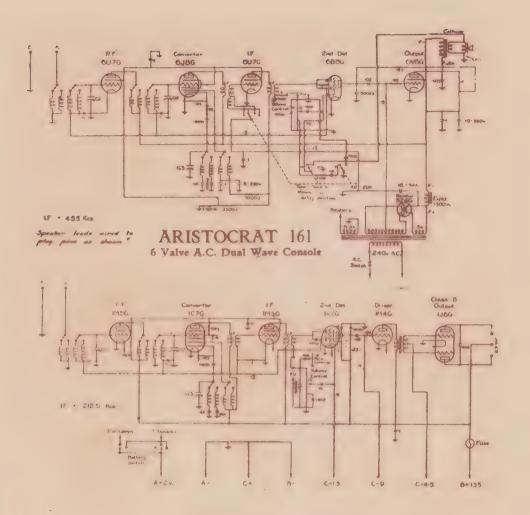
ARISTOCRAT 158S

5 Valve Broadcast Portable



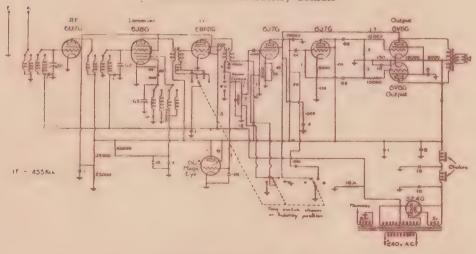
5 Valve Dry Cell Dual Wave Console and Mantel





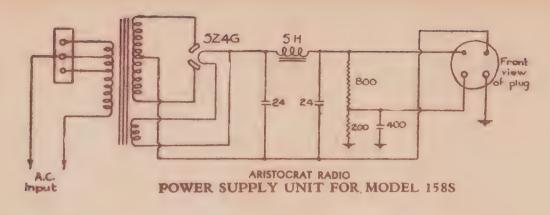
ARISTOCRAT 167

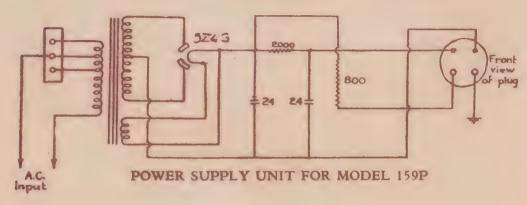
6 Valve Dual Wave Battery Console

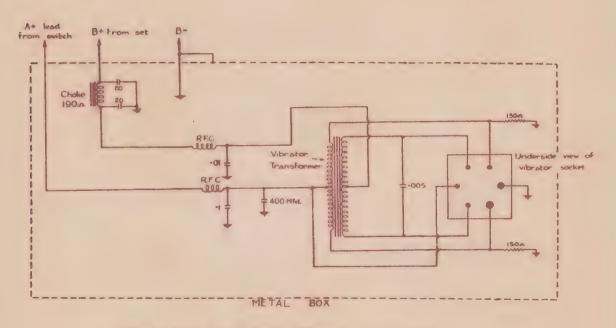


ARISTOCRAT 181

8 Vaive Dual Wave A.C. Console







VIBRATOR UNIT FOR MODELS 157—157M

100% TECHNICAL RADIO!



KEEP UP-TO-DATE

With the Latest Technical Developments

Make sure that you have Australia's ONLY 100% technical radio monthly posted to you EVERY month.

PLACE YOUR SUBSCRIPTION ORDER NOW

It will save you money and ensure that your copy is posted direct to you the same day that it comes off the printing press.

SPECIAL TRADE OFFER

Members of the Radio Trade are entitled to the special trade subscription rate of 8/6 for twelve issues (normally 1/- each), and POST FREE. Send your order NOW.

The "AUSTRALASIAN RADIO WORLD" is published by A. G. HULL

prominent technical journalist, who was for ten years Technical Editor and Editor of "Wireless Weekly," and Editor of "Radio and Hobbies."

Editorial Offices: 117 Reservoir St., Sydney. 'Phone: MA 2455

FREE SAMPLE COUPON

If you haven't seen the NEW "Radio World" you don't know what you are missing Send for a FREE sample to-day. We'll be glad to send you a copy, FREE and POST FREE. Address your letter to The Publisher, "Australasian Radio World," 117 Reservoir Street, Sydney.

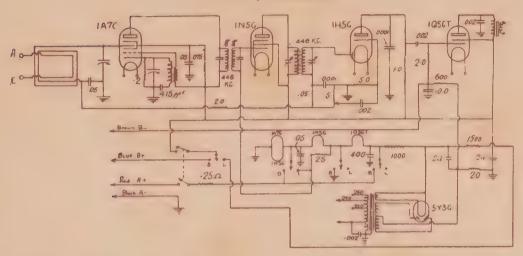
NAME	
ADDRESS	

BREVILLE RADIO

Manufactured by Breville Radio Pty. Ltd., Camperdown, N.S.W.

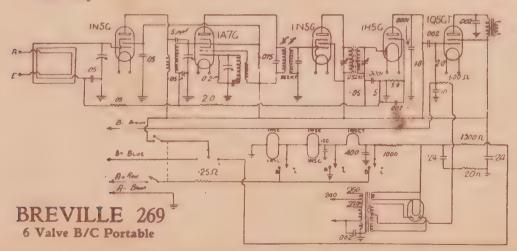
BREVILLE 268

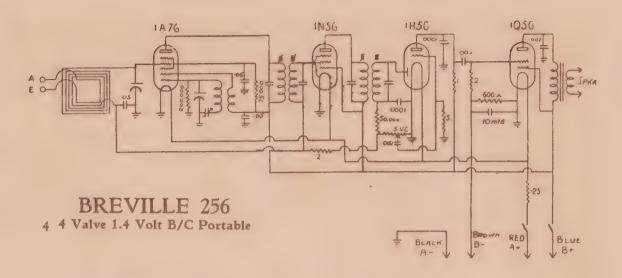
5 Valve B/C Portable

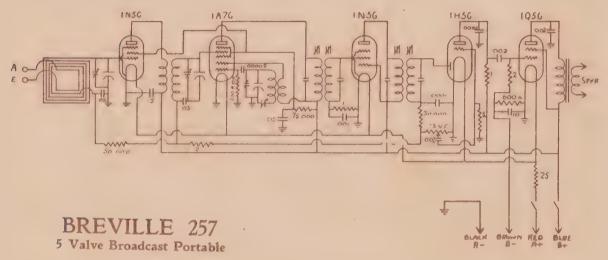


TO REMOVE CHASSIS FROM CABINET - Models 268 & 269

- (1) First switch receiver OFF at the volume control switch and if connected to A.C. mains, switch off at power point and remove power plug.
 (2) Draw out the batteries, disconnection is not necessary.
- (3) Disconnect leads from cabinet top to 1 and 2.
- (4) Undo the chassis fastening bolts, the heads of which are underneath the shelf
- (5) Withdraw the chassis. To refit chassis, reverse the above procedure. Take particular care that:-
- (6) Maroon lead connects to 1 and Black lead to 2.
- (7) Replace asbestos insulation between 5Y3G valve and the PR8 battery.







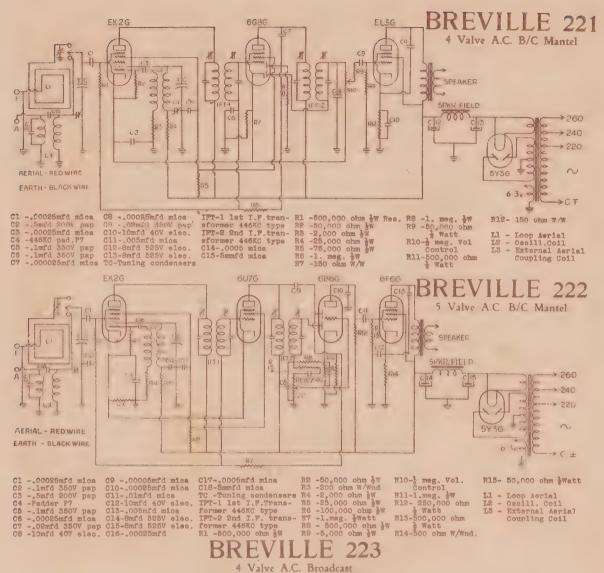
TO REMOVE CHASSIS FROM CABINET.

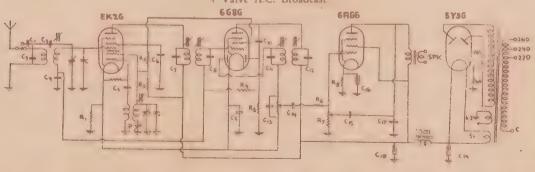
FIRST SWITCH RECEIVER OFF.

- (1) Draw out batteries. There is no need to disconnect them.
- (2) Disconnect the leads coming from the loop, these are inside the cabinet.
- (3) Undo the chassis fastening bolt, the head of which is underneath the shelf.
- (4) Withdraw the chassis.

TO REFIT CHASSIS.

Reverse the above procedure taking particular care that the leads are connected correctly.





C1 - .0001 mf C2 - 5mmf C3 - .0005 mf C4 - .1 mf C5 - 60 mmf

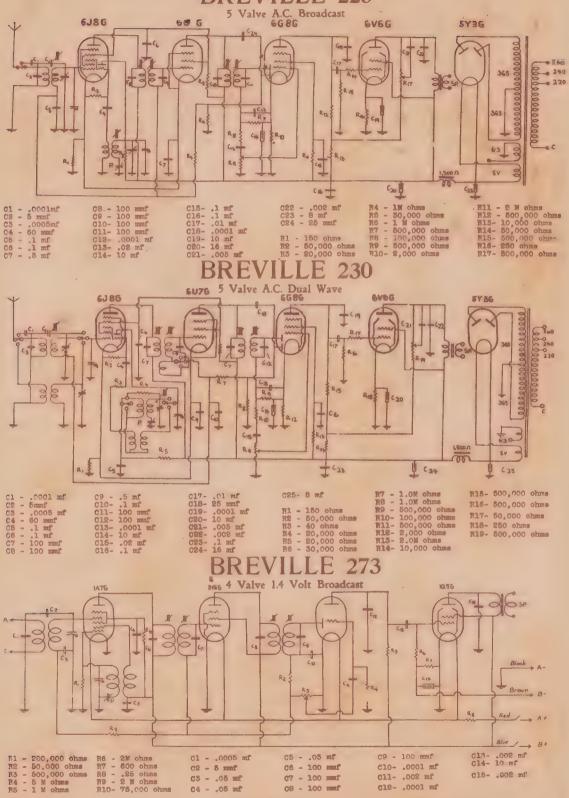
C6 - .1 mf C7 - 100 mmf C8 - 100 mmf C9 - .5 mf C10- 25 mmf

C11 - 100 mmf C12 - 100 mmf C13 - .00025 mf C14 - .02 mf C16 - 25 mmf

C16 - 25 mf C17 - .002 mf C18 - 16 mf C10 - 9 mf R1 - 150 ohus R2 - 20,000 ohus R3 - 20,000 ohus R4 - 1M ohus R5 - 1M ohus

R6 - 50,000 ohms R7 - 500,000 " R8 - 150 ohms

BREVILLE 229

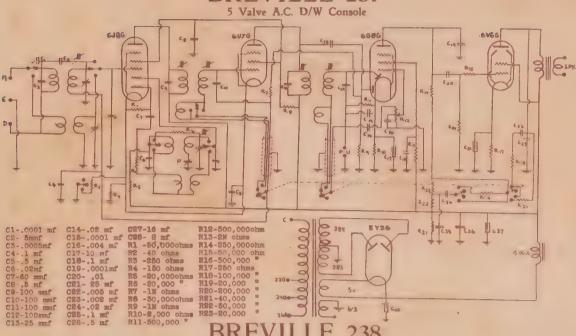


C4 - .05 mf

08 - 100 mmf

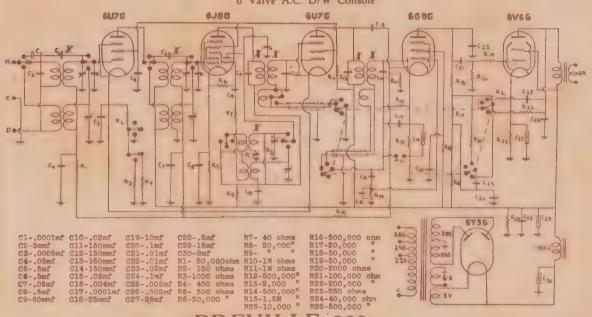
012- .0001 mf

BREVILLE 237



BREV

6 Valve A.C. D/W Console



BREVILI

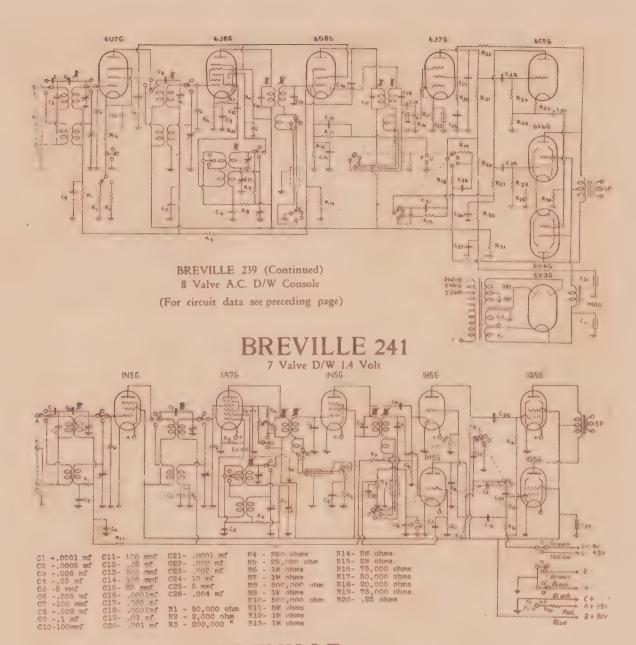
8 Valve A.C. D/W Console

C10001mf	C12-100mmf
C2-5 mmf	C13-100mmf
C30005mf	C14000lmf
C4-8 mf	C151 mf
C505mf	C16-25 mmf
065 mf	C17- 100mmf
C705mf	C18-100mmf
C8-5 mmf	C1905 mf
C95 mf	020004mf
C10-60 mmC	C2101mf
C1102 mf	C22- 10mf

G THITC	7 71-01		~	00110010
0231 mf		Rl	₩.	io,000 ohm
C24005mf		RZ	-	1000 ohm
C250001mf		R3	_	600 ohm
C265 mf		R4	-	300 ohm
C275 mf		R5	100	1M ohm
C2801 mf		R6	and a	300 ohm
C2901 mf		R7	-	50,000 ohm
C5001 mf		R8	-	20,000 ohm
CS1- 16 mf		R9	-	10,000 ohm
C325 mf		R10)-4	lO ohms

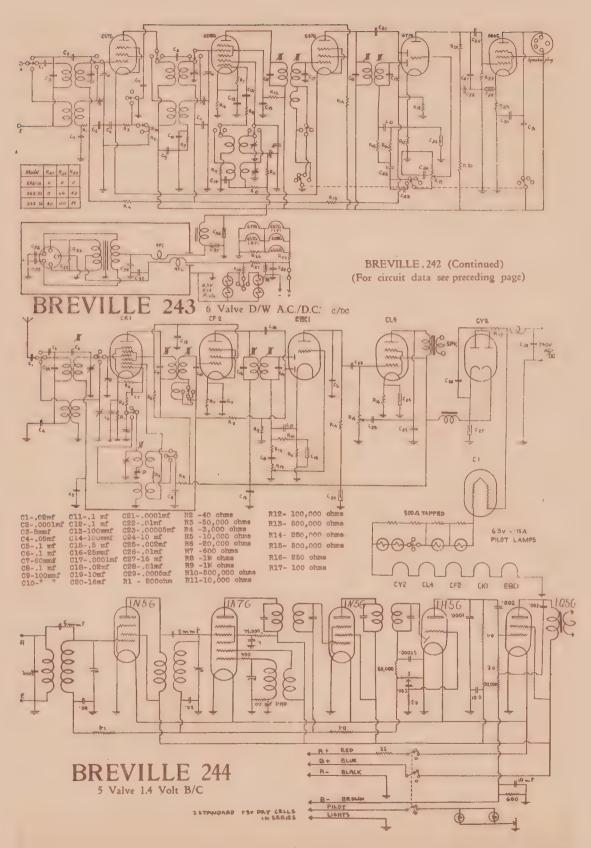
R11-50,000 ohm	R2:
R12-400 ohms	R23
R13-500,000 *	R24
R14- 1W ohms	R25
R15- 30,000 ohm	R26
R16- 500,000 "	R27
R17-2.000 ohm	R28
R18- 25,000 "	R29
R19-100,000 "	R30
R20-30,000 ohm	R31
R21-25,000 ohm	R39

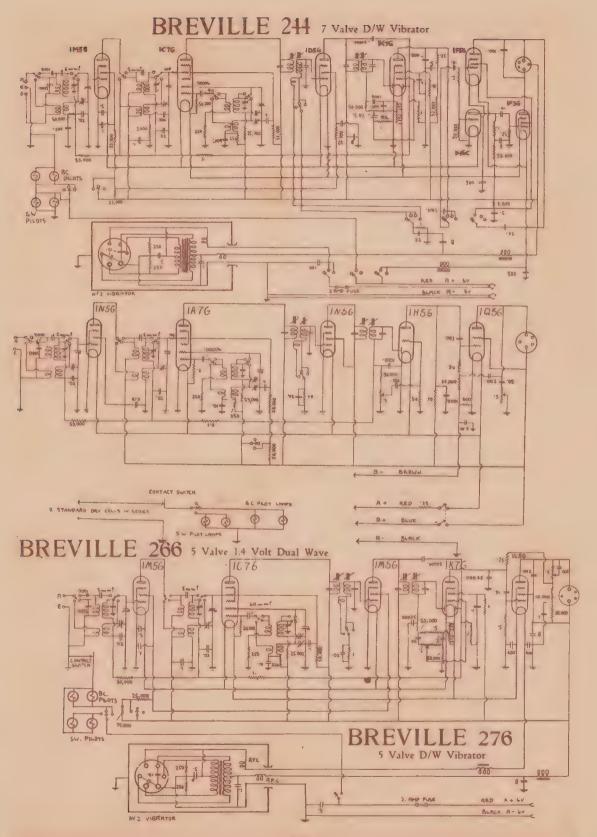
2- 2m ohms
5- 1m ohms
4-100,000 ohms
5- 5,000 ohms
6- 50,000 ohms
7- 100,000 ohms
8-500,000 ohms
9-280 ohms
0-500,000 ohms
1- 40,000 ohms
2-50,000 ohms



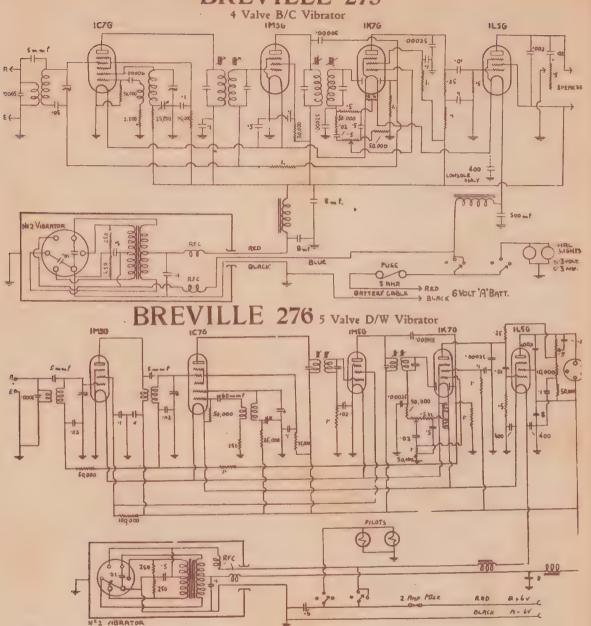
BREVILLE 242

5 Valve 12 Volt D/W Vibrator Home Lighting Plant Receiver





BREVILLE 275

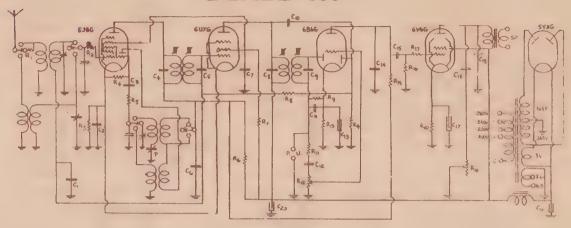




BEALE RADIO

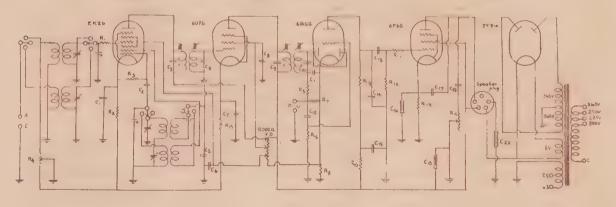
Manufactured by Beale & Co. Ltd., Annandale, Sydney, N.S.W.

185



R1 - 250,000 ohms	R9 - 500,000 ohms	R17- 50,000 ohms	C61 mf	C1400025 mf
R2 - 100 ohms	R10- 250 ohms	R18- 15,000 ohms	C71 mf	C1501 mf
R3 - 150 ohms	R11- 50,000 ohms		C8 - 100 mmf	C16- 8 mf
R4 - 50,000 ohms	R12- 500,000 ohms	Cl1 mf	C9 - 100 mmf	C17- 10 mf
R5 - 100 ohms	R13- 5,000 ohms	C25 mf	Clo00005 mf	C1805 mf.
R6 - 10,000 ohms	R14- 1M ohms	C5 - 60 mmf	Cll00025 mf	C19002 mf
R7 - 30,000 ohms	R15- 250,000 ohms	C4 - 100 mmf	C1202 mf	C20- 16 mf
R8 - 1M ohms	R16- 500,000 ohms	· C5 - 100 mmf	Cl3- 10 mf	P - P7 Padder

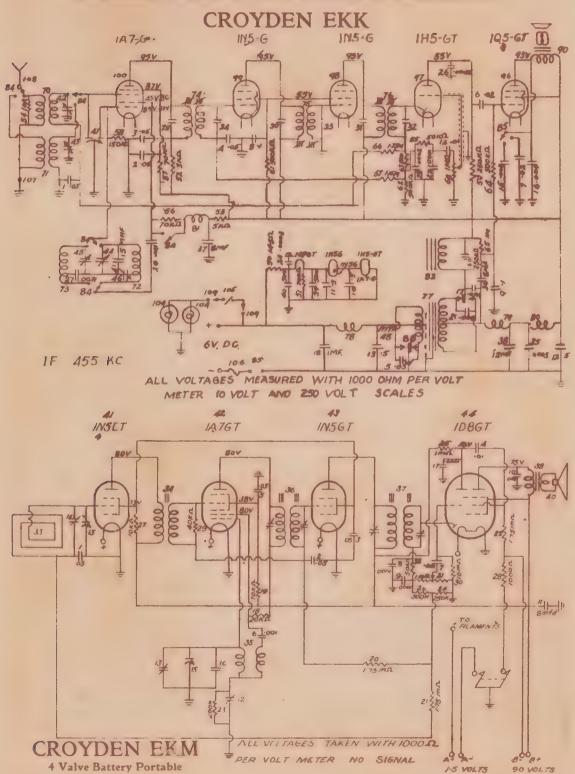
BEALE 481 (Non A.V.C.)

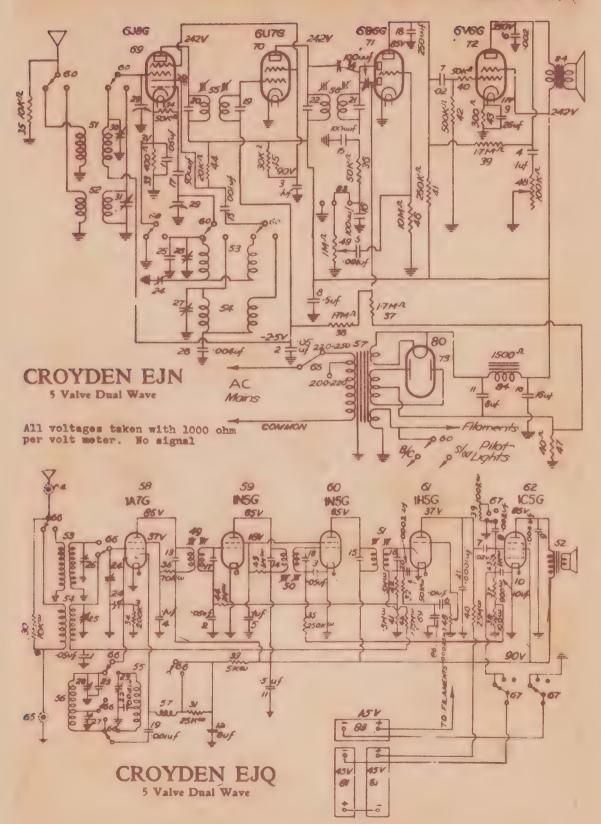


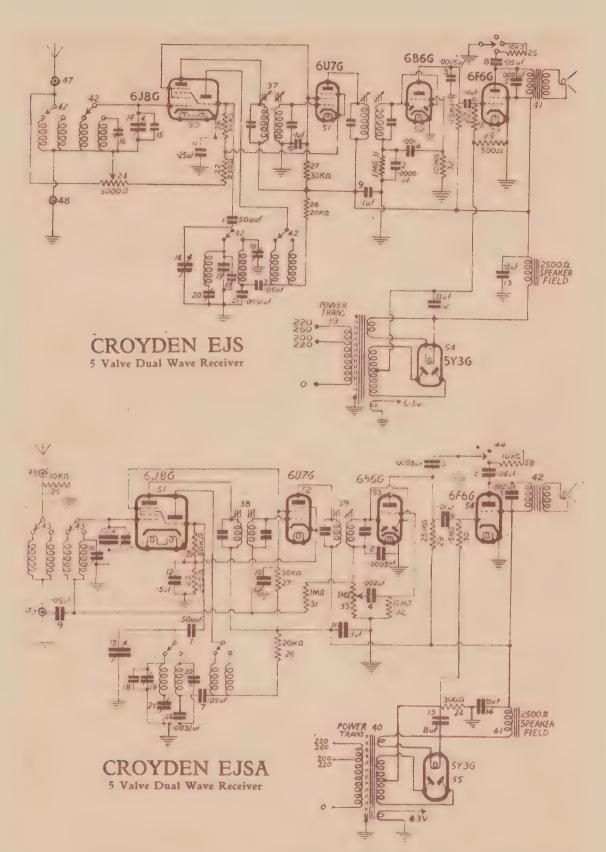
C11 mf	C81 mf	015- ,1 mr	R2 - 400 ohms	R9 - 250,000 ohm
G200005 mf	C9 - 100 mf	C16- 10 mf C17002 mf	R3 - 50,000 ohms R4 - 2,500 ohms	R10- 100,000 ohm
C4 - 100 mf	Cll00025 mf	C18- 16 mf	R5 - 50,000 ohms	R12- 500,000 ohm
C51 mf	C1202 mf		R6 - 500,000 ohms 1	R15- 500 ohms
C61 mf	C1501 mf C1400025 mf	C20- 8 mf R1 - 40 ohms	R7 - 500,000 ohms R8 - 66 ohms	R14- 15,000 ohms R15- 600 ohms

CROYDEN RADIO

Manufactured by Eclipse Radio Pty. Ltd., 11 Sturt St., Sth. Melbourne, S.C.4.

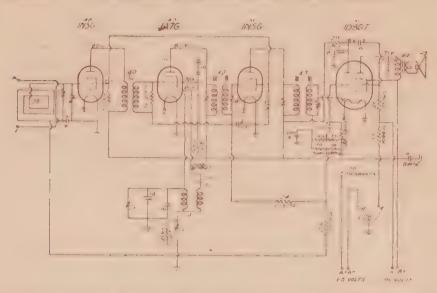






CROYDEN EJP

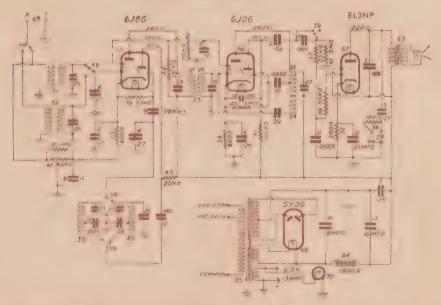
4 Valve Battery Operated Heavy Duty Portable



RANGE: Kilocycles 1600 - 540 Kc. Metres 187.5 - 555.5
All voltages taken with 1000 ohms per volt meter. No. signal.

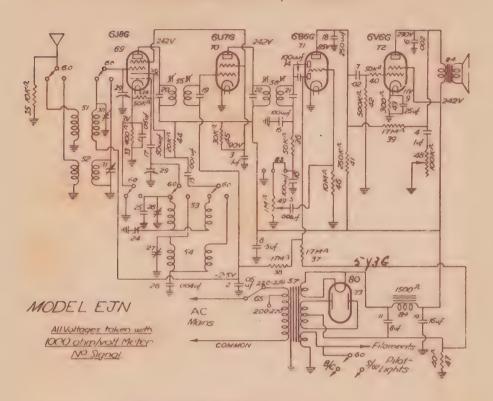
CROYDEN EKR

4 Valve Dual Wave Mantel

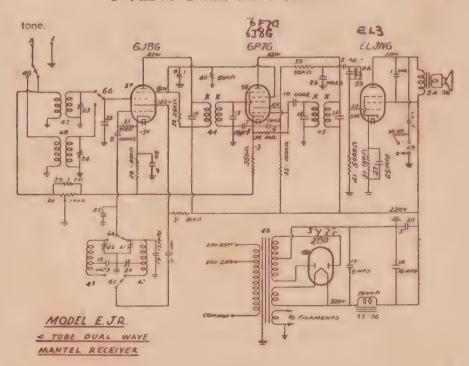


RANGE: B/C Band: 540 Kc. to 1620 Kc. S/W - 6.9 m/c to 22.25 m/c. (13.5 metres to 43.5 metres).

ECLIPSE MODEL E.J.N. 5 Valve Dual Wave Console



ECLIPSE MODEL E.J.R. 4 Valve Dual Wave Mantel



FISK RADIOLA

Manufactured by Amalgamated Wireless (A'sia) Ltd., 47 York Street, Sydney

FISK RADIOLA 63

Valve, One Band, Dry Cell Battery Operated (Optional Power Supply),
Portable Superheterodyne

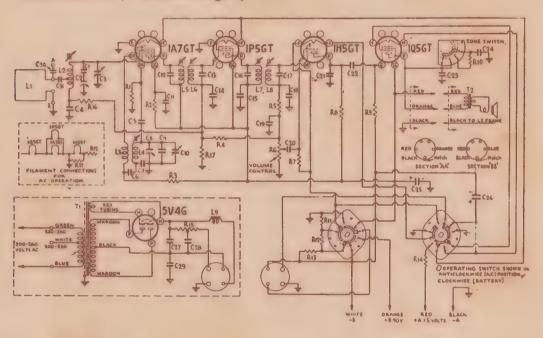
TUNING RANGE: "Standard Mediun Wave" - 1600-550 Kc/s.

R.F. ALIGNMEN' GETTLE GS: 600 Kc/s. and 1500 Kc/s. (Osc. and Aer.).

INTERMEDIATE FREQUENCY: 455 Kc/s.

BATTERY COMPLEMENT: "A" Battery — 1.5 volts. "B" Battery — 90 volts.
BATTERY CURRENT CONSUMPTION: "A" Battery — .25 amp. "B" Battery — 9 M.A.

VALVE COMPLEMENT: (1) 1A7GT Frequency Converter. (2) 1P5GT I.F. Amplifier. (3) 1H5GT 2nd Det., AVC and A.F. Amp. (4) 1Q5GT Output Tetrode. LOUDSPEAKER (Permanent Magnet) — 5".



Code No.	RESISTORS.	Code No.	CONDENSERS.		
RI	200,000 ohms 1/3W	CI	70 mmfd mica (N)		
R2	70,000 ohms 1W	C2	8-50 mmfd mica trimmer		
R3	40,000 ohms 1W	C3	Tuning Condenser		
R4	1.75 megohms 1/3W	C4	.05 mfd paper	C18	110 mmfd mica (L)
R5	20,000 ohms 1/3W	C5	110 mmfd mica (L)	C19	110 mmfd mica (L)
R6	500,000 ohms Vol. Contr.	C6	.05 mfd paper	C20	.02 mfd paper
R7	2.3 megohms 1/3W.	C7	450 mmfd mica (Pad)	C21	200mmfd mica (J)
RS	I megohm IW	C8	8-50 mmfd mica trimmer	C22	.02 mfd paper
R9	1.75 megohms 1/3W.	C9	9 mmfd mica (B)	C23	.0025 mfd paper
RIO	10,000 ohms 1/3W	C10	Tuning Condenser	C24	.02 mfd paper
RH	26 ohms 3W	CH	.05 mfd paper	C25	20 mfd 200 P.V. Electro
R12	34 ohma 3W	C12	70 mmfd mica (N)	C26	400 mfd, 12 P.V. Electro
R13	600 ohma IW	C13	70 mmfd mica (N)	C27	20 mfd, 200 P.V. Electro
R14	0.4 ohms wire wound	C14	.05 mfd paper	C28	20 mfd, 200 P.V. Electro
R15	1040 ohms wire wound	CIS	.5 mfd paper	C29	400 mfd, 12 P.V. Electro
R16	100,000 ohms 1/3W	C16	70 mmfd mica (N)	C30	1000 mmfd mica
R17	500,000 ohms 1/3W	C17	70 mmfd mica (N)	C31	.05 mfd paper

FISK RADIOLA 63 (Continued)

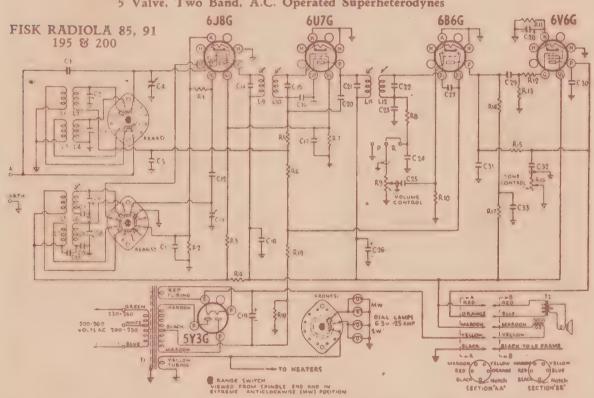
SOCKET VOLTAGES

, V .	ALVE	CONTROL GRID TO CHASSIS	SCREEN GRID TO CHASSIS	PLATE TO CHASSIS VOLTS	PLATE CURRENT	FILAN	
		VOLTS	VOLTS		M.A.	BATTERY.	POWER
la7gT	Converter	0	35	90	0.8	1.4	十1.4
	Oscillator		-	50	0.65	-	-
1P5GT	I.F. Amp.	0	90	90	1.2	1.4	+ 1.4
1H5GT	2nd Detector	0	-	60 +	•08	1.4	-1.4
1Q5GT	Output	-6 *	90 -	89	5.6	1.4	+ 2.8
5V4G	Rectifier	200/100V ttery Cur	110 MA.				

Cannot be measured accurately with ordinary voltmeter. Measured with no signal input. Volume control at maximum clockwise.

FISK RADIOLA 85, 91, 195, 200 & 312

5 Valve, Two Band, A.C. Operated Superheterodynes



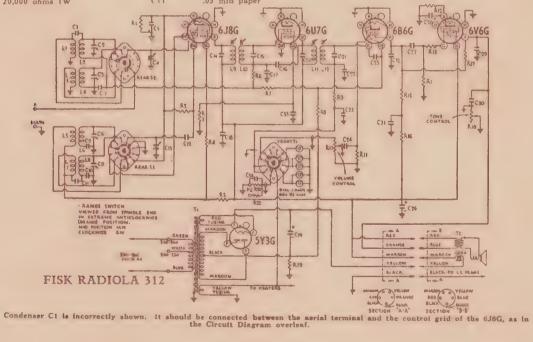
NOTE:-Pick-up terminals, shown in the circuit diagram, are not provided in the Models 91 and 200.

TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. "Short Wave" - 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" - 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). "Short Wave" - 15M. (Osc. and Aer.) INTERMEDIATE FREQUENCY: 455 K.C. POWER CONSUMPTION: 75 watts. VALVE COMPLEMENT: (1) 6J8G Freq. Converter. (2) 6U7G I.F. Amplifier. (3) 6B6G 2nd Det., AVC and A.F. Amp. (4) 6V6G Output. (5) 5Y3G Rectifier. LOUDSPEAKER: Models 85 & 91 - 7". Models 195,200 and 312 - 12 inch.

FISK RADIOLA 85, 91, 195, 200 & 312 (Continued)

Field Coil Resistance: 1500 ohms.
UNDISTORTED POWER OUTPUT — 4.2 watts.

		CIRC	CUIT DATA FOR 85, 91,	195 ANI	200
Code	COILS.	R8	50,000 ohms 1/3W	C12	70 mmfd mica (N)
No.	Aerial Coil 1600-550 K.C.	R9	500,000 ohms Vol. Cont.	C13	Tuning Condenser
L1, L2		RIO	10 megohms 1W	C14	70 mmfd mica (N)
L3, L4	Aerial Coil 13.6-45M	RH	250 ohme 3W	C15	70 mmfd mica (N)
L5, L6	Oac. Coil 1600-550 K.C.	R12	50,000 ohms 1/3W	C16 ·	01 mfd paper
L7, L8	Osc. Coil 13.6-45M	R13	500,000 ohms 1/3W	C17	.1 mfd paper
L9, L10	1st I.F. Transformer	R14	250,000 ohms 1W	C18	.1 mfd paper
L11, L12	2nd I.F. Transformer	R15	1.75 megohms 1W	C19	16 mfd, 500V. electrolytic
		R16	100,000 ohms Tone Cont.	C20	4 mmfd mioa
		R17	20,000 ohms 1W	C21	70 mmfd mica (N)
	TRANSFORMERS.	R18	40 ohms 3W	C22	70 mmfd mica (N)
Ti	Power Transformer 50- 60C	R19	2.3 megohme 1/3W	C23	110 mmfd mica (L)
TI	Power Transformer 40C	C 1		C24	110 mmfd mica (L)
T2	Loudspeaker Transfor-	Code No.	CONDENSERS.	C25	.01 mfd paper
	mer (85, 91)	CI	4 mmfd mica	C26	16 mfd 350V. regulating elec-
Т2	Loudspeaker Transfor- mer (195 200)	C2	2-20 mmfd air trimmer		trolytic
		C3	2-20 mmfd air trimmer	C27	50 mmfd mica (D)
Code No.	RESISTORS.	CA	Tuning Condenser	C28	25 mfd 25V. électrolytic
R1	50,000 ohms 1/3W	C5	.05 mfd paper	C29	.02 mfd paper
R2	350 ohms 1/3W	C6	11-29 mmfd air trimmer	C30	.0025 mfd paper (195, 200) .015 mfd paper (85, 91)
R3	8000 ohms 1W	C7	440 mmfd mica (padder)	C31	200 mmfd mica (J)
R4	6000 ohms 2W	C8	2.10 mmfd air trimme.	C32	.1 mfd paper
R5	100,000 ohms 1/3W	C9	4000 mmfd mica (padder)	C33	.5 mfd paper
R6	1.75 megohms 1/3W	C10	.05 mfd paper		
R7	20,000 ohms IW	CH	.05 mfd paper		
	C) Ai	£		+ 0.0	The control of the co



FISK RADIOLA 312 (Continued)

	7 101	. 101010111 311 (00111111)		
Code	COI _b .	限9 50,000 ohms 1/3W	C10	4000 mmfd mice (padd
L1, L2	Aerial Cou 1600-550 K.C.	R10 500,000 ohms Vol. Cont.	CII	.05 mfd paper
	***************************************	RII 10 megohms 1W	C12	70 mmfd mica (N)
L3, L4	Aerial Coil 13.6-45M	R12 250 ohme 3W	C13	Tuning Condenser
L5, L6	Osc. Coil 1600-550 K.C.	R13 50,000 ohms 1/3W	C14	70 mmfd mica (N)
L7, L8	Osc. Coil 13.6-45M	R14 500,000 ohms 1/3W	C15	70 mmfd mica (N)
L9, L10	1st I.F. Transformer	R15 250,000 ohms IW	C16	4 mmfd mica
Lir, Liz	2nd l.F. Transformer	R16 20,000 ohms IW	C17	.01 mfd paper
			C18	
		Ri7 1.75 megohms IW		.l mfd paper
	TRANSFORMERS	Ris 100,000 ohms Tone Cont	C19	16 mfd 500V. electro
Ti	Power Transformer 50-	R19 40 ohms 3W	C20	70 mmfd mica (N)
	AUC	R20 50,000 ohms 1/3W	C21	70 mmfd mica (N)
Ti	Power Transformer 40C	R21 20,000 ohme 1/3W	C22	110 mmfd mica (L)
T2	Loudspeaker Transfor-		C23	110 mmfd mica (L)
	West	Code	C24	.01 mfd paper
Code		No. CONDENSERS.	C25	50 mmfd mice (D)
No.	RESISTORS.	C1 4 mmfa mica	C26	16 mfd 350V. Reg. Floc
RI	350 ohme 1/3W	C2 2-20 mmfd air trimmer	C27	.02 mfd paper
R2	50,000 ohms 1/3W	C3 2-20 mmfd air trimmer	C28	25 mfd 25V. electrolytic
R3	20,000 ohma IW	C4 Tuning Condenser	C29	.0025 mfd paper
R4	8000 ohme 1W	C5 .05 mfd paper	C30	.1 mfd paper
R5	6000 ohme 2W	C6 11-29 mmfd air trimmer	C3 F	.5 mfd paper
R6	100,000 ohms 1/3W	C7 .05 mfd paper	C32	200 mmfd mica (J)
R7	1.75 megohms 1/3W	C8 2-10 mmfd air trimmer	C33	.1 mfd paper
R8	2.3 megohms 1/3W	C9 440 mmfd mica (padder)	C34	
1/4	7.3 megonus 1/3 w		654	.01 mfd paper

SOCKET VOLTAGES.

VALVE			Bias Volts	Chassis		Plate Current M.A.	Heater Volts
6J8G Converter	M.W	•••	-3*	95	255	1.3	6.3
	S.W.	***	-3	95	255	1.3	****
Oscillator	M.W		-	***	160	5.0	-
	S.W	1400		_	160	5.0	
6U7G I.F. Amplifie	r M.W		-3*	95	255	8.0	6.3
	S.V	٧.	-3#	75	255	8.0	****
6B6G 2nd Detecto	r	000	0		125*	0.52	6.3
6V6G Output	**** **** **	"	12.5*	255	242	14.0	6.3
5Y3G Rectifier 8	00/400	rolts	, 75	M.A.	Total c	urrent,	5.0.

*Cannot be measured with ordinary voltmeter.

Measured at 240 volts, A.C. supply. No signal input. Volume Control at maximum.

FISK RADIOLA 86, 197, 198 & 502

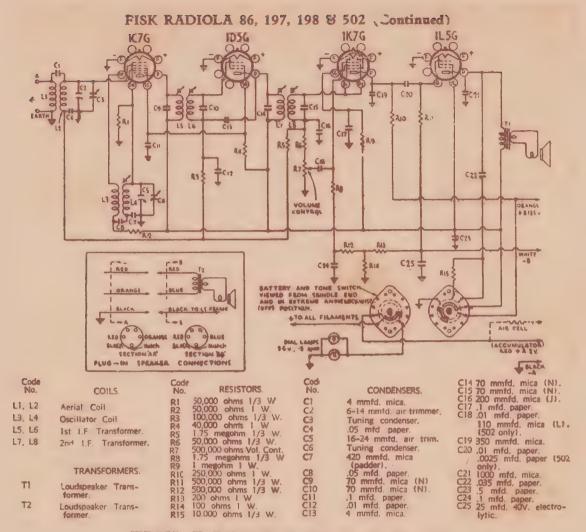
4 Valve, One Band, Battery Operated Superheterodynes

TUNING RANGE: 1600-550 K.C. R.F. ALIGNMENT SETTINGS—600 K.C. (Osc. INTERMEDIATE FREQ.: 455 K.C. 1500 K.C. (Osc. & Accurrent consumption—"A" Battery at 2 volts—0.54 amp. "B" Battery at 1 volts-14 M.A.

REPLACEMENT FUSE—3/8 amp.

VALVE COMPLEMENT—1C7G Converter. 1D5G I.F. Amplifier. 1K7G 2nd D A.V.C. and Audio Amplifier. 1L5G Output Pentode.

LOUDSPEAKER: (Permanent Magnet).
UNDISTORTED POWER OUTPUT—350 milliwatts.



FISK RADIOLA 86-Z & 502-Z

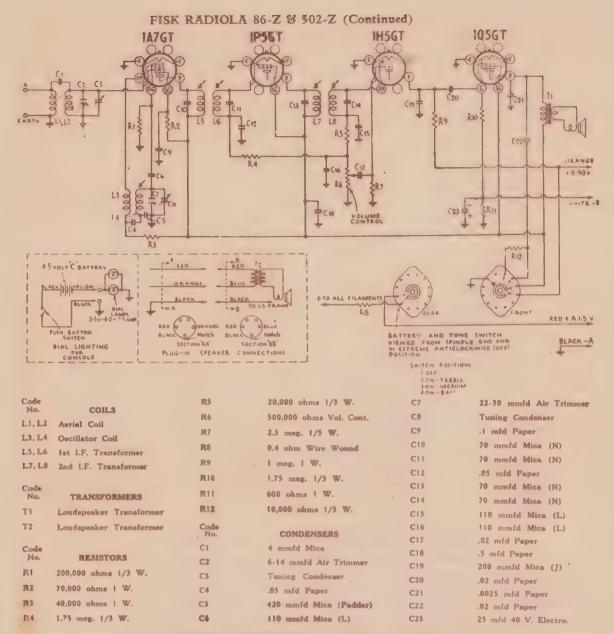
4 Valve, One Band, Dry Cell Battery Operated Superheterodynes

TUNING RANGE: 1600-550 K.C. R.F. ALIGN SETTINGS: 600 K.C. (L.F. Osc.), 1500 Kc/s. (H.F. Osc. and Aer.). INTER FREQ.: 455 Kc/s. CURRENT CONSUMPTION: "A" Battery at 1.5 volts — .25 amp. "B" Battery at 90 volts — 10 M.A. VALVE COMPLEMENT: 1A7GT Converter. 1P5GT I.F. Amp. 1H5GT 2nd Det. A.V.C. and A.F. Amplifier. 1Q5GT Output Tetrode. LOUDSPEAKER: (Permanent Magnet). UNDISTORTED POWER OUTPUT: 170 milliwatts.

VALVE	Bias Volts	Screen Grid to Chassis Volts	Plate to Chassis Volts	Plate Current M.A.	Filament Volts
IA7GT Converter	0	40	84	0.2	1.4
Oscillator	-	-	55	0.8	-
IPSGT I.F. Amp	0	84	84	1.5	1.4
IH5GT 2nd Det	0	*	504	.03	1.4
IQ5GT Output	-6	84	80	6.0	1,4

^{*} Cannot be measured with ordinary voltmeter.

Measured with no signal input and Volume Control in the maximum clockwise position.



FISK RADIOLA 87 & 199

5 Valve, Two Band, Battery Operated Superheterodynes

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C. "Short Wave" — 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" — 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). "Short Wave" — ·15M (Osc. and Aer.). INTER. FREQ.: 455 K.C. BATTERY COMPLEMENT: "A" Battery — 2 volt Accumulator. "B" Battery — 135 volt. "C" Battery — 4.5 volt. CURRENT CONSUMPTION: "A" Battery .60 amp. "B" Battery — 15-18 M.A.

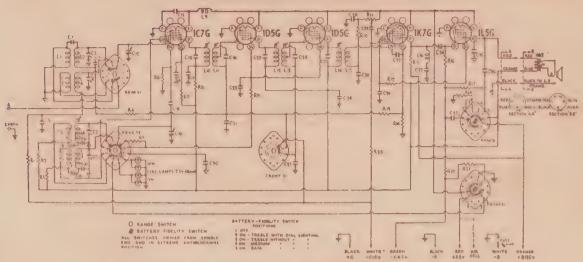
VALVE COMPLEMENT: (1) 1C7G Freq. Converter. (2) 1D5G I.F. Amplifier. (3) I.F. Amp. (4) 1K7G 2nd Det., A.V.C. and A.F. Amp. (5) 1L5G Output Pentode.

RÉPLACEMENT FUSE: 3/8 amp.

LOUDSPEAKER: (Permanent Magnet).

UNDISTORTED POWER OUTPUT: 350 milliwatts.

FISK RADIOLA 87 & 199 (Continued)



NOTE:Condenser	C38	which	is not	shown.	should b	e connected	from 1K7G	plate to ground.	
----------------	-----	-------	--------	--------	----------	-------------	-----------	------------------	--

Code No.	COILS.	RB	1.75 Megohma 1/3W	C14	.1 mfd paper
	Aerial Coil 1600-550 K.C.	R14	2.3 Megohms 1/3W	C15	115 mmfd mica (A)
L1, L2		R15	250,000 ohms 1W	C16	130 mmfd mica (H)
L3, L4	Aerial Coil 13.65-45M	R16	390,000 ohms 1/3W	C17	.05 mfd paper
L5, L6	Osc. Coil 1600-550 K.C.	R17	200,000 ohms 1/3W	C18	70 mmfd mica (N)
L7, L8	Osc. Coil 13.65-45M.	R18	15,000 ohms 1/3W	C19	Tuning Condenser
1.9	Filament Choke	R19	100,000 ohms 1/3W	C20	8 mfd 450V. electrolytic
L10, L11	1st I.F. Transformer	R20	1 75 Megs. 1/3W	C21	.02 mfd paper
L12, L13	2nd I.F. Transformer	R21	600 ohms IW .	C22	.1 mfd paper
L14, L15	3rd 1.F. Transformer	1201	oo omme i v	C23	115 mmfd mica (A)
L16, C33	I.F. Filter	No.	CONDENSERS		
		. Code		C24	130 mmfd mica (H)
Code No.	RESISTORS.	CI	4 mmfd mics	C25	70 mmfd mica (N)
R1	100,000 ohms 1/3W	C2	2-20 mmfd air trimmer	C26	.1 mfd paper
		C3	.05 mfd paper	C27	.02 mfd paper
R2	40,000 ohms 1W	C4	8-26 mmfd air trimmer	C 28	110 mmfd mica (L)
R3	400 ohms 1/3W	C5	.05 mfd paper	C29	.01 mfd paper
R4	100,000 ohms 1/3W	C6	440 mmfd mica (padder)	C30	110 mmfd mica (L)
R5	100,000 ohms !W	C7 .	16-34 mmfd air trimmer	C31	.1 mfd paper
R6	30,000 ohms 1/3W			C3 2	50 mmfd mica (D)
R7	40,000 ohms IW	C8	.05 mfd paper	C33	115 mmfd mica (A)
R8	300 ohms 1/3W	C9	2-10 mmfd air trimmer	C34	.05 mfd paper
R9	100,000 ohms IW	C10	4000 mmfd mica (padder)	C35	.0025 mfd paper
R10	20,000 ohms 1/3W	CH	.05 mfd paper	C36	
R11 7903	500,000 ohms Vol. Cont.	C12	Tuning Condenser	C37	.05 mfd paper 2000 mmfd mica
R12	1 Megohm IW	.C13	.1 mfd paper	C38	200 mmfd mica (J)

Control Screen
Grid to Grid to Plate to Plate FileSOCKET VOLFAGES. Chassis Chassis Current ment

	17,020,	Volts	Volts	Volts	M.A.	Volts
IC7G Converter	M.W	0	47	133	1.45	2.0
	S.W	0	52	133	2.15	
Oscillator	M.W			62	1,5	-
	5.W.		_	130	4.2	
IDSG I.F. Amp.	M.W	0	23	135	0.8	2.0
	S.W	0	31	135	1,3	-
IDSGI.F. Amp.	M.W,	-1,5	23	135	0.24	2.0
	S.W	0	31	135	1.15	
IK7G 2nd Detect	or	-1.5*	16*	35*	0.18	2.0
ILSG Pentode		-4.5*	135	130	5.0	2.0

^{*} Cannot be measured accurately with ordinary voltmeter.

Measured with no signal input and volume control in maximum clockwise position.

FISK RADIOLA 88 8 190

5 Valve, Two Band, Vibrator Operated Superheterodynes

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C.

"Short Wave" — 13.65-45M.

INTER. FREQ.: 455 K.C.

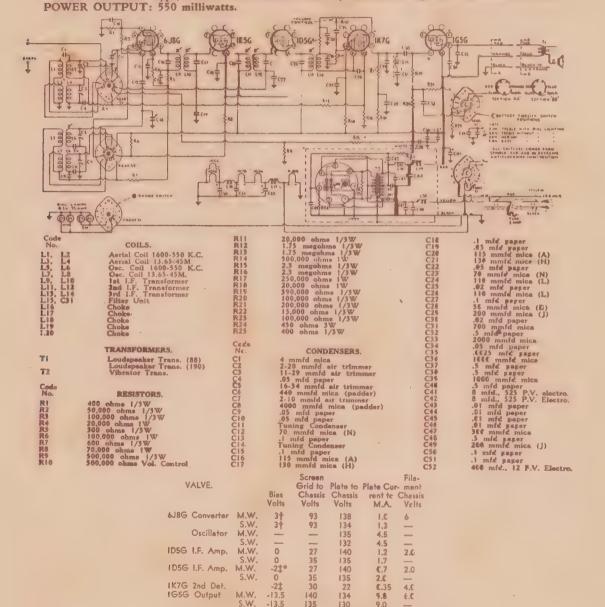
BATTERY: 6 volt Accum.

CURRENT CONSUMPTION: 1.4 amps.

REPLACEMENT FUSE: 3.0 amp.

VALVE COMPLEMENT: (1) 6J8G Freq. Converter. (2) 1D5G I.F. Amp. (3) 1D5G I.F., Amplifier. (4) 1K7G 2nd Det., A.V.C. and A.F. Amp. (5) 1G5G Output Pentode.

VIBRATOR: Oak Type, 65UT. LOUDSPEAKER: (Permanent Magnet). UNDISTORTED POWER OUTPUT: 550 milliwatts.



Measured with 1000 ohms per volt meter. + Cathode to chassis.

Control grid to negative filament

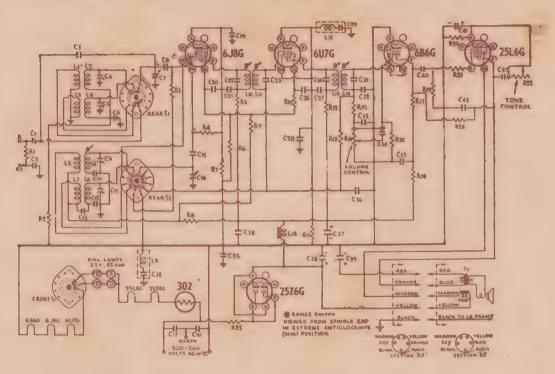
^{*} Cannot be measured with ordinary voltmeter.

Measured with Volume Control maximum clockwise.
No signal input.

FISK RADIOLA 89 & 189

5 Valve, 'Two Band, Universal A.C-D.C. Operated Superheterodynes.

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C. "Short Wave" — 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" — 600 K.C. (Osc.), 1500 R.C. (Osc. and Aer.). "Short Wave" — 15M (Osc. and Aer.). INTERMEDIATE FREQ.: 455 K.C. POWER CONSUMPTION: 90 watts. VALVE COMPLEMENT: (1) 6J8G Freq. Converter. (2) 6U7G I.F. Amp. (3) 6B6G 2nd Det., A.V.C. and A.F. Amp. (4) 25L6G Output. (5) 25A6G Rectifier. 302-Barretter. LOUDSPEAKER: 7" and 12". Field Coil Resistance 2500 ohms. UNDISTORTED POWER OUTPUT: 2.2watts. MAINS FUSES: 3 amp.



Code		R12	600 ohme 1/3W	C16	Tuning Condenser
No.	COILS.	R13	1.75 megohms 1/3W	C17	.1 mfd paper
L1, L2	Aerial Coil 1600-550 K.C.	RI4	500,000 ohms Vol. Cont.	C18	.l mfd paper
L3, L4	Aerial Coil 13.65-45 M.	RIS	50,000 ohms 1/3W	C19	.02 mfd paper
L5, L6	Osc. Coil 1600-550 K.C.	R16	10 megohme IW	C20	.l mfd paper
L7, L8	Osc. Coil 13.65-45 M.	R17	200,000 ohms 1W 50,000 ohms 1W	C21 C22	.l mfd paper
L9, C14	Filter Unit	R19	390,000 ohms 1/3W	C23	70 mmfd mica (N) 70 mmfd mica (N)
1.10, L11	1st I.F. Transformer	R20	150 ohms 3W		. 1 mfd paper
L12, C29 L13, L14	Filter Unit 2nd I.F. Transformer	R21	50,000 ohms 1/3W	C25	.01 mfd paper
L15	Filter Choke	R22	100,000 ohms Tone Cont.	C26	.1 mfd paper
	a state Citoric	R23	100 ohms 3W	C27	.1 mfd paper
	TRANSFORMERS	R24	19 megohms IW	C28	.01 mfd paper
Ti '	Loudspeaker Trans-	Code		C29	.3500 mmfd mica
**	former (Mantel)	No.	CONDENSERS.	C30	
TI	Loudspeaker Trans-			C31	70 mmfd mica (N)
	former (Console)	C1 C2	500 mmfd mica 500 mmfd mica	C32	70 mmfd mica (N)
c .			4 mmfd mica	C33	110 mmfd mica (L)
Code	RESISTORS.	C4	2-20 mmfd air trimmer	C34	
No.		C5	2-20 mmfd air trimmer	C35	.01 mfd paper
RI	100,000 ohma 1/3W	C6	.02 mfd paper	C36	.5 mfd paper
R2 R3	400 ohms 1/3W 500,000 ohms 1/3W	C7	Tuning Condenser	C37	.05 mfd paper
R4	50,000 ohms 1/3W	C8	350 mmfd mica		8 mfd, 525 P.V. Electro
R₽	600 ohms 1/3W	C9 C10	11-29 mmfd air trimmer	C38	16 mfd, 525 V.P. Electro
Rá	20,000 ohms IW	CII	440 mmfd mica (padder)	C39	8 mfd 525 P.V. Electro
R7	300 ohms 1/3W	CI2	2-10 mmfd air trimmer	C40	.01 mfd paper
P8	6000 ohms 2W		4000 mmfd mica (padder)	C41	25 mfd 25 V. Electro
23	8000 ohms 1W	CI3	.05 mfd paper	C42	.1 mfd paper
K10		. C14	3500 mmfd mica	C43	.0025 mfd paper—R189
RH	600 ohms 1/3W	CIS	70 mmfd mica (N)		.035 mfd—R89

SOCKET VOLTAGES

		CATHODE	SCREEN GRID	PLATE TO	PLATE	HEATER
		TO NEGATIVE	TO NEGATIVE	NEGATIVE	CURRENT	
VALVE		VOLTS	VOLTS	VOLTS	M.A.	VOLTS
6J8G	Converter					
	M.W.	2.5	100	205	1.0	6.3
	S.W.	2.5	100	205	1.5	-
	Oscillator					
	M.W.	₩	to.	150	4.0	44
	S.W.	-	en .	150	4.0	•
607G	I.F. Amp.	3.5	80	205	4.5	6.3
6B6G	2nd Det.	0		120	0.35	6.3
25 L6G	Output	7.0	106	85 *	38	25.0
25Z6G	Rectifier	250	en	235	-	25.0
27 - 34 -			300 34-	# dannah ha		

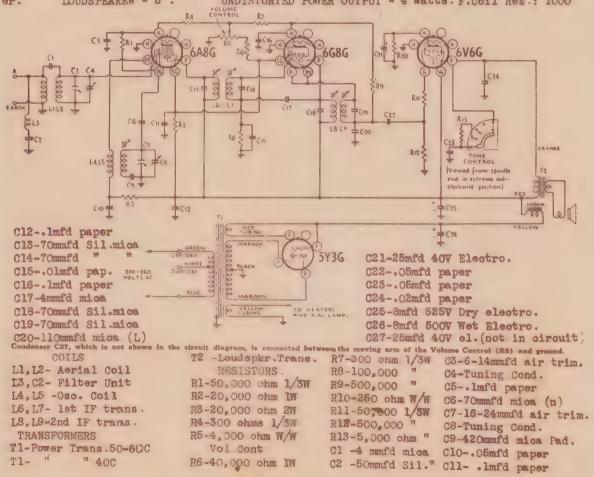
Voltage across loudspeaker field - 120 volts. Teannot be measured with ordinary voltmeter. Measured at 240 volts D.C. No signal. All controls maximum clockwise.

FISK RADIOLA 92

4 Valve, One Band, A.C. Operated Superheterodyne

TUNING RANGE: 1600-550 Kc/s. R.F. ALIGNMENT SETTINGS: 600 Kc/s. (L.F. Osc.), 1500 Kc. (H.F. Osc. and Aer.) INTERMEDIATE FREQ.- 455 Kc/s. POWER CONSUMPTION - 60 watts.

VALVE COMPLEMENT - 6ASG Converter. 6GSG I.F. Amp. and 2nd Det. 6V6G Output. 5Y3G Rectifier. LOUDSPEAKER - 5". UNDISTORTED POWER OUTPUT - 4 watts. F.Coil Res.: 1000



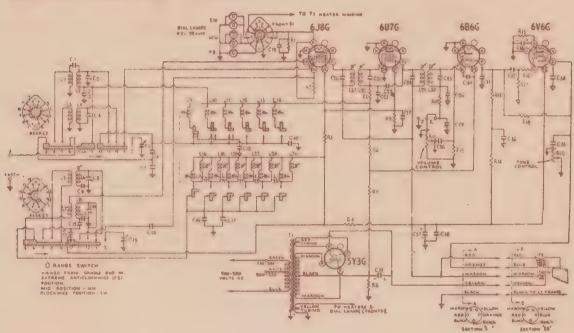
FISK RADIOLA 92 (Continued)

SOCKET VOLTAGES

VALVE		CATHODE TO CHASSIS VOLTS	SCREEN GRID TO CHASSIS VOLTS	PLATE TO CHASSIS VOLTS	PLATE CURRENT M.A.	FILAMENT VOLTS
6A8G	Converter	2.7	95	250 .	3.0	6.3
	Oscillator	do	₩	160	4.0	· -
6G8G	I.F. Amp.					
	2nd Det.	2.5	95	250	7.0	6.3
6V6G	Output	11.0	250	250	40	6.3
5Y3G	Rectifier	640/320 Vo	lts, 60 M.A. To	tal Current 5.0		
Voltag	ge across loud	speaker field -	60 volts. Me	sasured at 240 T	volts A.C.	Supply.
No sie	mal input. V	olume control at	maximum clooks	rise.		

FISK RADIOLA 196

TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. "Short Wave" - 13.65-45 M.
R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" - 600 K.C. (Oso.), 1500 K.C. (Oso.
and Aer.) "Short Wave" - 15 M. (Oso. and Aer.) INTERMEDIATE FREQ.: 455 K.C.
POWER CONSUMPTION: 75 watts. VALVE COMPLEMENT - (1) 6J8G Freq.Converter.
(2) 6U7G I.F. Amp. (3) 6B6G 2nd Det. AVC and A.F. Amp. (4) 6V6G Output. (5) 5Y3G Rectifier. LOUDSPEAKER: 12". Field Coil Resistance - 1500 ohms.
UNDISTORTED POWER OUTPUT - 4.2 watts.



NOTE:—Condenser CI is incorrectly shown, and should be connected from Asrial to Control Grid 6J8G. Push button circuits, containing coils L9, L10, L11, cover a range from 550—1000 K.C. The remaining three circuits cover a range from 880—1600 K.C.

R1-350 ohm 1/3W R2-50,900 ohm 1/3W	R9 -20,000 ohm 1W R10-50,000 ohm 1/3W	R17-500 000 ohm 1/3W R18-1.75 meg. 1W	
R3-8000 ohm 1W	R11-500,000 ohm V.C.	R19-100,000 ohm T.C	C6- 260mmfd mioa
R4-6500 ohm 2W	R12-10 meg. 1W	Cl -4 mmfd mica	C7- 2000 mmfd mica
R5-100,000 ohm 1/3W	R13-250,000 ohm lW	C2 -2-20mmfd air	C8 -11-29mmfd air
R6-1.75 meg.1/3W	R14-20,000 ohm 1W	trimmer	trimmer
R7-2.3 meg.1/3W	R15-250 ohms 3W	C3O5mfd paper	C9- 440mmfd mica
R8-40 ohm 3W	R16-50,000 ohm 1/3W	C5-Tuning Cond.	(Padder)

FISK RADIOLA 196 (Continued)

C10	2-10 mmfd air trimmer	C21	, a a assessment deren deren	C3 2	.02 mfd paper
CH	4000 mmfd mica (Padder)	C22	4 mmfd mica	C33	25 mfd., 25v electrol-tic
C12	.05 mfd paper	C23	.02 mfd paper.	C3 4	.0025 mfd paper
C13	900 mmfd mica	C24	70 mmfd mica (N).	C35	.1 mfd paper
C14	70 mmfd mien (N)	C25		C36	.5 mfd paper
C15	Tuning Condenser	C26	110 mmfd mica (L)	C37	16 mfd, 350 P.V.
C16	200 mmfd temp. comp.	C27	.l mfd paper		Regulating Electro.
C17	32-50 mmfd air trimmer	C28	.01 mfd paper	C38	.1 mfd paper
C18	43 mmfd mica (X)	C29		C39	16 mfd, 500 V. Electro.
C19	.05 mfd paper	C30		C40	9 mmfd mica (B)
C20	70(d Miss. (N)	C2.1	200(1)		

SOCKET VOLTAGES.

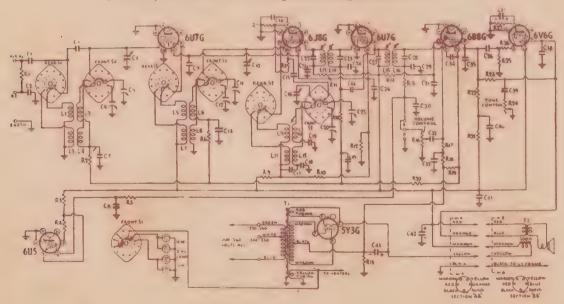
	VALVE		Bias	Screen Grid to Chassis Volts.	Chassis	Plate Current M.A.	Heater Volts.
6J8G	Converter	M.W.	-3*	. 95	255	ļ.3	6.3
		s.w.	-3	95	255	1.3	_
	Oscillator	M.W.	_	alastical	160	- 5.0	
		S.W.	-	toud/fit	160	5.0	
6U70	5 I.F. Amp.	M.W.	-3*	95	255	8.0	6.3
		s.w.	-3*	95	255	0,8	attent
5 B6 G	2nd Detec	tor	0		125*	0.52	6.3
6V66	Output .	.,	-12.5	255	242	44.0	6.3
5Y30	Rectifier	800/	400 v	olts, 75M.A	. Total	current	5.0
				**1 1*	14 1		

^{*} Cannot be measured with ordinary voltmeter.

Measured at 240 volts, A.C. supply. No signal input. Volume Control at maximum.

FISK RADIOLA 273

6 Valve, Two Band, A.C. Operated Superheterodyne



FISK RADIOLA 273 (Continued)

TUNING RANGES: "Standard Medium Wave" 1600-560 K.C. "Short Wave" 13.6-45 M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" 600 Ko/s (Oso.), 1500 Ko/s. (Oso., R.F. and Aer.- "Short Wave" 15 M. (Oso., R.F. and Aer.).

INTERMEDIATE FREQ.: 455 Ko/s. POWER CONSUMPTION - 80 watts.

VALVE COMPLEMENT: (1) 6U7G R.F. Amp. (2) 6J8G Freq. Converter. (3) 6U7G I.F. Amp. (4) 6B8G 2nd Det. AVC and A.F. Amp. (5) 6V6G Output. (6) 5Y3G - Rectifier. 6U5 Visual Tuning Indicator. LOUDSPEAKER: 12". Field Coil Resistance: 1500 ohms. UNDISTORTED POWER OUTPUT - 4.2 watts.

TO SENTED ! YOU OWNED ! ON	DIDIOUTED LOUISIT COLLOI	K-10 HW-4004
R1 - 100,000 ohms 1/3W	R26-50,000 ohm 1/3W	C21lmfd paper
R2 -100,000 " "	R27-250 ohm 5W	C22- 70mmfd mica: (H)
R3 -20,000 ohm IW	R28-100,000 ohm 1/3W	C23 - 70mmfd mica (N)
R4 - 1 megohm IW		C24Olmfd paper
R5 -1.75 meg. 1/3W	Cl -500mmfd mica	C25- 11-29mmfd air trim.
R6 -100,000 ohm "	C2 -500 mmfd mica	C26lmfd paper
R7 -300 ohms 1/3W	C3-4 mmfd mica	C27- 70mmfd mica (N)
R8 -30,000 chm 1/3W	C4 -Tuning Cond.	C28- " " " "
R9 -6000 ohm 27	C5 -2-20 mmfd air	C29-110mmfd mica (L)
R10-8000 ohm IW	trimmer	CSO- * " " "
R11-300 ohm 1/3W	C6 -2-20mmfd air t.	C31lmfd paper
R12-20,000 ohm lW	C7 05mfd paper	C32Olmfd paper
R13-33 ohm 3W	C8 O5mfd paper	C33lmfd paper
R14- 1.5 meg lW	C9lmfd paper	C34-50mmfd mica (D)
R15-50,000 ohm 1/3W	Clo-Tuning Cond.	C35-200mmfd mica (J)
R16-500,000 ohm V.C.	Cll-2-20mmfd air t.	C36O2mfd paper
R17-1.75 meg. 1/3W	Cl2- """ "	C37-25mfd 25V elec.
R18-500,000 ohm 1/3W	Cl305 mfd paper	C380025mfd paper
R19-2.3 meg. 1/3W	Cl4lmfd paper	C39lmfd paper
R20- 1.75 meg. 1/3W	C15-70mmfd mica (N)	C405mfd paper
R21-50,000 ohm. 1W	C16-Tuning Cond.	C415mfd paper
R22-200,000 ohm IW	C17O5mfd paper	C42-16mfd 350V reg.el.
R23-8 megohm IW	Cl8-3500mmfd mica (Pad)	C43-16mfd 500V elec.
R24-100,000 ohm T.C	C19-440mmfd mica (Pad)	C44-4mmfd mioa
R25-500,000 ohm 1/3W	C20-2-10mmfd air trim.	C45O5mfd paper
		A disease

VALVI	₹.		CONTROL	CATHODE	SCREEN	PLATE		
			GRID TO	TO	GRID TO	TO	PLATE	
			CHASSIS	CHASSIS	CHASSIS	CHASSIS	CURRENT	HEATER
			VOLTS .	VOLTS	VOLTS	VOLTS	M.A.,	VOLTS
6U7G	R.F.Amp.	M.W.	-2.7 *	0	90	255	7.5	6.5
		S.W.	-2.7 *	0	90	255	7.5	
6J8G	Convert.	M.W.	-2.7 4	2.5	90	255	0.6	6.3
		S.W.	_	2.8	90	255	1.0	-
	Oscill.	M.W.	-	-	-	150	7.0	-
		S.W.	-		-	150	7.0	-
6U7G	I.F.Amp.	M.W.	-2.7×	0	.90	255	7.5	6.3
		S.W.	-2.7 *	0	90	255	7.5	-
-6R8G	Detect.	1	-2.7*	0	80 \$	125#	0.5	6.3
	Output		•0.	12.5	255	245	44.0	6.5
	Regt.		700/350V			total dra		5.0

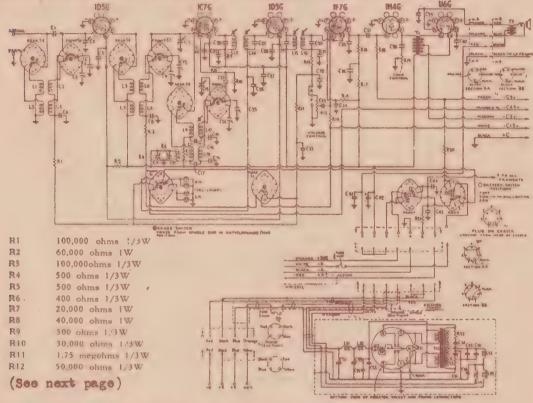
Cannot be measured with ordinary volmeter. Measured with receiver connected to 240 volts A.C. supply. Volume Control at maximum. No signal input.

FISK RADIOLA 275

6 Valve, Two Band, Battery Operated Superheterodyne

TUNING RANGES: "Standard Medium Wave" 1600-550 K.C. "Short Wave" 13.6-45 M. R.F. ALIGNMENT SETTINGS - "Standard Medium Wave" 600 Ko/s. (Oso.), 1500 Kos. (Osc., RF and Aer.) "Short Wave" 15 M. (Osc., R.F. and Aer.) INTERMEDIATE FREQ .: 455 Kc/s. CURRENT CONSUMPTION - "A" Battery at 2 volt-0.60 amp. (Battery operation). "A" Battery at 6 volts - 1.2 amp. (Vibrator operation). "B" Battery at 135 volts - 17-20 M.A. (Battery operation). REPLACEMENT FUSE : & Amp. (Battery operation). 5 amp. (Vibrator operation). VALVE COMPLEMENT - (1) 1D5G R.F. Amp. (2) 1C7G Freq. Converter. (3) 1D5G I.F. Amp. (4) 1F7G End Det. AVC and A.F. Amp. (5) 1H4G Audio Amplifier (6) 1J6C Clase "B" Output. LOUDSPEAKER (Permanent Magnet) 12". This Receiver may be operated using batteries entirely, or from a Vibrator Power Unit. Instructions for converting the Receiver from Battery to Vib-

rator operation, and vice-versa, are given further on.



CONVERSION FROM "B" BATTERY TO VIBRATOR POWER UNIT OPERATION. (a) Disconnect the battery cable from the chassis and remove the "A" & "B" batteries. (b) Place the Vibrator Power Unit in the lower compartment of the cabinet, where holse are provided for mounting and mount using the screws supplied. (c) Connect the plug on the Vibrator Power Unit cable to the chassis - see diagram. Connect the braiding on the to the chassis, using the screw provided for the purpose at the rear right-hand corner. (d) Connect the short cable to the 6 volt accumulator as shown in diagram. Place the accumulator in the lower compartment the cabinet or on the floor, and connect it to the Vibrator Power Unit cable by joining the plug and socket .

FISK RADIOLA 275 (Continued)

CONVERSION FROM VIBRATOR POWER UNIT TO "B" BATTERY OPERATION.

- and disconnect and remove the accumulator.
- (b) Remove the Vibrator Power Unit from the cabinet.

(a) Disconnect the Vibrator Power Unit cable from the chassis (c) Connect the battery cable to the plug on the chassis, not forgetting to insert the tip attached to the cable in the receptacle adjacent to the plug, and connect the batteries according to the diagram below.

•		
R13	500,000 ohms Vol. Control	Control Screen
R14	1.75 megohms 1/3W	Grid to Grid to Plate to Plate VALVE. Chassis Chassis Chassis Current Filament
R15	I megohm IW	VALVE. Chassis Chassis Chassis Current Filament Volts Volts Volts M.A. Volts
R16	200,000 ohms IW	, , , , , , , , , , , , , , , , , , ,
R17	50,000 ohms 1W	1D5G R.F. Amp. M.W. 0 45 135 2.5 2.0
R18	500,000 ohms 1/3W	S.W. 0 45 135 2.5 —
R19	100,000 ohms Tone Cont.	IC7G Converter M.W. 0 45 130 3.1 2.0
R20	900 ohma 1W	S.W1.5* 45 130 1.4 —
R21	4.5 ohms Wire Wound	Oscillator M.W. — 90 1.4 —
R51	400 ohms 1/3W	S.W. — — 125 3.5 —
R52	100 ohms 1/3W	IDSG I.F. Amp. M.W4.5 45 135 0.6 2.0
R53	100 ohma 1/3W	S.W. 0 45 135 2.0 —
Cod	CONDENSERS	1F7G Detector -1.5* 35* 65* 0.3 2.0
No.	CONDENSERS.	
CI	4 mmfd mica	1H4G Audio -9* — 135 2.0 2.0
C2	Tuning Condenser	IJ6G Output -3 135 4.0 2.0
C3	2-20 mmfd air trimmer	* Cannot be measured with ordinary voltmeter.
C4	2-20 mosfd air trimmer	Measured with no signal input. Volume Control at
C5	.1 mfd paper	maximum.
C6	.05 mfd paper	. LW, 51.0
C7	Deleted .05 mfd paper	CHO C CHIMINE CONTRACTOR
C8	8 m/d 500V, electrolytic	(0) (0) (0) (0) (0) F7G
C9	8 mfd 500V. electrolytic	IDSG CONTRACTOR OF THE PROPERTY OF THE PROPERT
C10 C11	2-20 mmfd air trimmer	(10 (13 L) 45 volts (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
C12	2-20 mmfd air trimmer	UNACC VILLE
C12	Tuning Condenser	1056
C14	.l mid paper	CIO BIND - +
C15	Tuning Condenser	1)66 Distance Asian Distance D
C16	.05 'mid paper	O O CAMBLETZ GAS CAR
C17	.05 mfd paper	
CI8	440 mmfd paper (Pad)	LINA AND COMPET PICK, UP TO TRANSPALS PLANDACE LINE, SPEAKER MACHINE TO A ADDI ARE ESTIMA
C19	3500 mmfd paper (Pad)	, and analysis Cults
C20	70 mmfd mica (N)	VILLOW RUIT TO ANTI-
CZI	70 mmfd mica (N)	VILLON B.UI TR. ACT
C22	.1 mfd paper	36 V-6 V
C23	70 mmfd mica (N)	NED RED
C24	2-10 mmfd air trimmer	(M)
C25	11.29 mmfd air trimmer	60 ACCUMULATOR
C26 ·	.02 mtd paper	Lay-out Diagram (top view), Showing Battery Connections.
C27	5 mfd paper	C51 25 mfd paper
C28	.1 mfd paper	.05 mid paper
C29	70 mmfd mica (N)	.02 mld paper
C30 ·	70 mmfd mica (N)	.005 mid paper
C31	110 mmfd mica (L)	C55 Ol nifd n ner
C32	110 mmfd mica (L)	The state of the s
C33	.02 mfd paper	C42 8 mfd. 525V. electrolytic C57 .015 mfd paper
C34	.1 mfd paper	C44 450 mmid mica C58 .01 mfd paper
C35	200 mmfd mica (J)	C45 .02 mfd paper C59 300 mmfd.
		102 mid paper

FISK RADIOLA 282, 283, 313 & 314

8 Valve, 4 Band, Automatic and Manual Tuning, A.C. Operated Superheterodynes

TUNING RANGES: "Standard Medium Wave" (a) 1600-550 Kc/s. "Short Wave" (b) 27-52M. "Short Wave" (c) 18-27M. "Short Wave" (d) 13.5-18M.

R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" (a) 600 Kc/s. (Osc.) 1500 Kc/s.

"Short Wave" (b) 28M. (Osc., R.F. and Aer.). "Short Wave" (c) 26M. (Osc., R.F. and Aer.). 18.7M. (Osc., R.F. and Aer.). "Short Wave" (d) 17.7M. (Osc., R.F. and Aer.). 14.0M. (Osc., R.F. and Aer.). INTERMEDIATE FREQ.: 455Kc/s.

POWER CONSUMPTION (Tuning Motor Inoperative): 95 watts. LOUDSPEAKER: 12". UNDISTORTED POWER OUTPUT: 8 watts.

FISK RADIOLA 282, 283, 313 & 314 (Continued)

VALVE COMPLEMENT: (1) 6U7G R.F. Amp. (2) 6J8G Freq. Converter. (3) 6U7G I.F. Ämplifier. (4) 6B8G Detector, A.V.C. and A.F. Amp. (5) 6B8G Phase Inverter and *Muting. (6) 6V6G — Output. (7) 6V6G Output. (8) 5V4G Rectifier. 6U5 Visual Tuning Indicator. *This function is not performed by valve in Model 282.

AUTOMATIC TUNING ADJUSTMENT LAMP: 6.3 volt, .25 amp.

These models are of two types, Console (Models 282 and 283), and Radio-Gramophone Combination (Models 313 and 314). Identical chassis, incorporating automatic tuning are used in all but the Model 282, which is manually tuned.

The only difference between the two Combination Models is in the type of gramophone motor used. The motor fitted to the Model 313 is manually operated, and that used in the Model 314 is an Automatic Record Changer Type.

NOTE: For information re Adjustments for Automatic Tuning, and Automatic Tuning Mechanism, see Fisk Radiola 280 in previous volume of this book.

SOCKET V/	VOLTAG ALVE,		Control (Grid to Chassis Volts.	Cathode to Chassis Volts.	Grid to	Plate to Chassis Volts.	Plate Current M.A.	Heater Volts.
6U7G	R.F. Amp.			0	100	260	8	6.3
		S.W.	-3.0*	0	100	260	8	_
₽8G	Converter	M.W.	-3.0*	2.8	100	260	0.5	6.3
- 1		S.W.	. 0	2.8	100	260	1.0	-
	Oscillator	M.W.	Page 1	-	_	130	7	_
		S.W.	_	_	400000	130	. 7	
6U7G	I.F. Amp.	M.W.	-3.0*	3.8	100	260	4	6.3
		-S.W.		0	100	260	8	
6B8G	Detector		-3.0°	_	35*	125*	0.5	6.3
6B8G	Phase Inve	rter	-3.0°	0	35*	125*	0.5	6.3
6V6G	Output		0	13.5	260	250	38	6.3
	Output		0	13.5	260	250	38	6.3
	Rectifier		650/325		120 M.A.	Total Cu	rrent	5.0

Tuning Motor Voltage (no load), 27 volts A.C. Tuning Motor Voltage (on load), 24 volts A.C. Voltage across laudspeaker field — 75 volts

Measured at 240 volts A.C. supply. No signal input. Controls in maximum clockwise position excepting Range Switch, which is set as required.

*Cannot be measured with ordinary voltmeter.

FISK RADIOLA 313 — GRAMOPHONE MOTOR SERVICE

AUTOMATIC STOP ADJUSTMENT.

The Patent Stop and Switch is fully automatic.

As the needle travels towards the centre of the Record, the Pick-up Arm moves the Friction Plate, which, through the friction pad and spring, cerries with it the Main Lever.

This Main Lever moves in towards the Turntable Spindle on which is mounted the Striker, which gently wipes against the Lever at every revolution, thus tapping back the Main Lever.

The "tapping back" process continues until the needle reaches the "run-in" groove in the centre of the record. The lever

is now moved forward into the path of the striker, which strikes the side of the lever and trips the Stop mechanism.

If Stop fails to operate at unish of record, there is probably insufficient friction. This may be rectified by turning the friction screw in a clockwise direction.

When Stop operates early, i.e., before needle reaches the end of the record, the trouble is due to excessive friction.

As this adjustment is very sensitive, the screw should not be turned more than a quarter of a turn at a time. Excessive friction may cause a knocking sound to be heard in the loudspeaker and undue wear on records.

FISK RADIOLA 314 — AUTOMATIC RECORD-CHANGER

THE AUTOMATIC TRIP. The automatic trip plays an important part in the operation of the record changer, upon the certainty of the automatic trip coming into action depends the whole operation of the record changer.

The auto trip mechanism will operate on all records having a "run off" groove, either eccentric or spiral.

The auto trip will not operate on records without a "run off" groove, and if trouble is experienced with the pick-up remaining at the end of a record and so preventing the changer from operating, it is advisable to see that the record has a "run off" groove before attempting to make any adjustment to the mechanism.

OPERATION OF AUTOMATIC TRIP.

The method of operation is as follows:—The Trip Lever being connected to the Pick-up Arm through a series of levers, is moved forward towards the Main Spindle, a distance proportional to the advance made by the Pick-up. The Striker is fitted upon the main spindle in order to push back the Trip Lever and prevent the Auto Trip from operating whilst the record is being played. When the Pick-up reaches the end of the playing grooves and is moved into the "eccentric" or "run-off" groove, the movement

trensmitted to the Trip Lever is too much to allow of its being pushed back by the Striker, which strikes the metal Trip Leve itself, and by tripping it, operates the changing mechanism.

STRIKER ADJUSTMENT.

The correct (and silent) functioning of the Trip mechanism depends on the rubber bush on the Trip Lever. When this bush becomes badly worn, a tapping sound will become apparent, and the Trip may operate before the end of the record. This fault may be rectified by turning the rubber bush round, in order to present a new surface to the Striker.

FRICTION ADJUSTMENT,

The Friction Adjusting Screw is readily accessible when the Turntable is removed.

If the Changer fails to operate at the end of a record, the record spindle should be removed, the Turntable lifted off, and the friction screw adjusted.

Before adjusting this screw, it is advisable to make sure that the operating and trip lever is clear of the base plate, and not setting up additional friction by rubbing the plate.

FISK RADIOLA 282, 283, 313 & 314 (Continued)

To adjust the friction, give the friction adjusting screw a small turn in an anti-clockwise direction to increase the friction.

If the Changer trips before the Pick-up has reached the end of the playing grooves, or if a bumping noise is heard through the amplifier, the Screw should be turned the opposite way, i.e., in a clockwise direction, to decrease the friction. As this adjustment is very sensitive, the screw should be turned not more than a quarter of a turn at a time.

RECORDS.

If an occasional slowing-up is noticed in the reproduction, the trouble is most likely due to the record slipping through being concave or warped. If slip occurs on a new record, examine the centre hole for burrs left in record manufacture. Carefully remove these burrs with a penkniife.

PICK-UP ARM ADJUSTMENT.

The Pick-up Arm has been finely adjusted so that the needle comes on to the 10in, record on 9§in, diameter circle, and comes on to the 12in, record on 11§in, diameter circle. These dimensions have been arrived at after checking over a very wide selection of records of various makes.

There may be a tew records where the playing groove starts further away from the centre, and in these exceptional cases the needle would come on to the record a few grooves in instead of on the plain part. If the Changer was set for these exceptional records it would mean that the Pick-up would not be lowered on to the edge of records of normal size.

Should the dropping position of the needle require adjustment, a screw, which is accessible through a hole in the unit-plate, should be turned either to left or right, according to requirements—a quarter of a turn in either direction will give the maximum adjustment obtainable.

The adjustment should afterwards be checked by running the Changer and noting the dropping position.

When making any adjustments to the Pick-up Arm, it should on no account be forced into position, and if the turntable is turned by hand it should never be turned backwards.

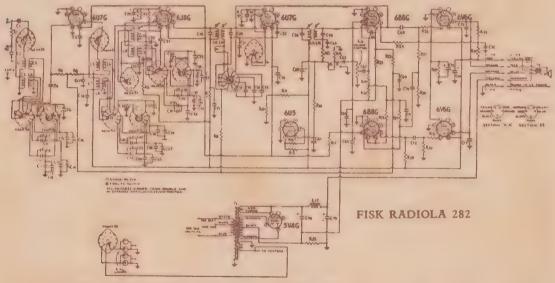
AUTO SWITCH.

The Record Changer automatically stops after the last record has played, and this is achieved by means of the centre spindle.

The weight of a record on the centre spindle moves a lever, which interrupts the movement of the Switch Lever from the cam, so preventing the switch from operating.

When the record is removed from the centre spindle, the spindle lifts and allows the lever to move so that it does not interrupt the switch lever, thereby allowing the switch to operate.

If trouble is experienced with the Auto-Switch not operating at the end of the last record, see that all the levers are free and that all the springs are fixed correctly. Also see that the centre apindle is free in the main spindle—it should move about one-eighth inch when pressed down and should rise the same amount when released. This test should be made when the Changer is in the playing position.



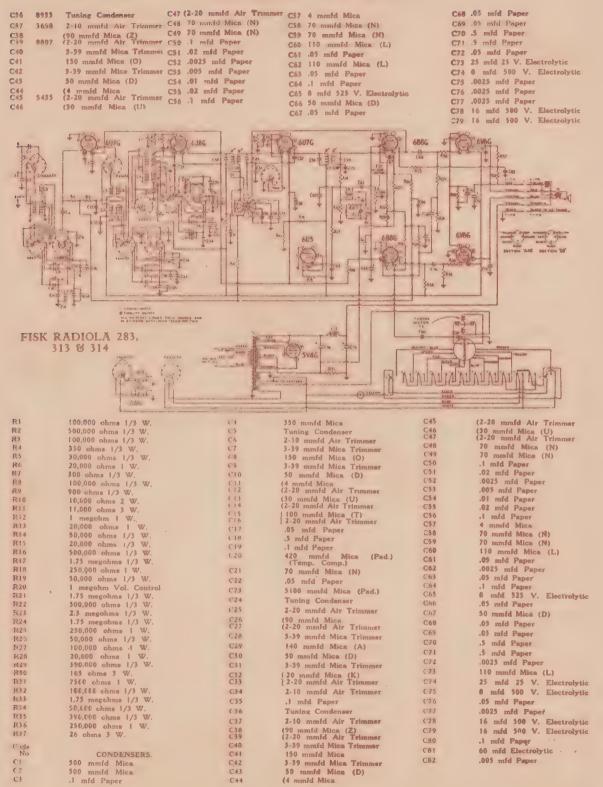
RI	100,000 ohms 1/3 W.	R18	I meg. Vol. Control
R2	500,000 ohms 1/3 W.	R19	1.75 megohms 1/3 W.
R3	100,000 ohms 1/3 W.	R20	500,000 ohms 1/3 W.
R4	350 ohms 1/3 W.	R21	2.3 megohms 1/3 W.
R5	30,000 ohme 1/3 W.	R22	100,000 ohms 1/3 W.
R6	20,000 ohms I W.	R23	1.75 megohms 1/3 W.
R7	300 ohms 1/3 W.	R24	250,000 ohms W.
R8 .	100,000 ohms 1/3 W.	R25	1.75 megohms 1/3 W.
R9	900 ohms 1/3 W.	R26	50,000 ohms 1/3 W.
R10	10,000 ohme 2 W.	R27	390,000 ohms 1/3 W.
		R28	7,500 ohms W.
RH	11,000 ohms 3 W.	R29	250,000 ohms ! W.
RIZ		R30	390,000 ohms 1/3 W.
R13	20,000 ohms 1 W.	R31	50,000 ohms 1/3 W.
R14	1.75 nieg. 1/3 W.	R32	165 ohms 3 W.
R15	50,000 ohms 1/3 W.	R33	100,000 ohms W.
R16	500,000 ohms 1/3 W.	R34	20,000 ohms 1 W.
R17	250,000 ohms 1 W.	R35	26 ohms 3 W.

_	
CI	500 mmfd Mica
C2	500 mmfd Mica
C3	.l mfd Paper
C4	350 mmfd Mica
C5	Tuning Condenser
C6	2-10 mmfd Air Trimn
C7	3-39 mmfd Mica Trim
CB	150 mmfd Mica (O
C9	3-39 mmfd Mica Trim

C9	3-39 mmfd Mica	Trimmer
C10	50 mmfd Mica	(D)
CII	4 mmfd Mica 2-20 mmfd Air	
CIZ	2-20 mmfd Air	Trimmer
C13	30 mmfd Mica 2-20 mmfd Air	(U)
C14	12-20 mmfd Air	Trimmer
CIA	{ 100 mmfd Mica 2-20 mmfd Air	(T)
C10	(Z-20 mmld Air	Trimmer
C17	.05 mfd Paper	
C18	.5 mfd Paper	
1		

C19 .1 mfd Paper
C20 420 mmfd Mica (Pad.) (Temp. Comp.)
C21 70 mmfd Mica (N)
C22 .05 mfd Paper
C23 5100 mmfd Mica (Pad.)
C24 Tuning Condenser
C25 2-20 mmfd Air Trimmer
C26 90 mmfd Mica (Z) C27 2-20 mmfd Air Trimmer
C28 3-39 ,mmfd Mica Trimmer
C29 140 mmid Mica (IA)
C30 50 mmfd Mica (D)
C31 3-39 mmfd Mica Trimmer
C32 { 20 mmfd Mica (K) C33 { 2-20 mmfd Air Trimmer
C34 2-10 mmfd Air Trimmer
C25 1 (-) D '

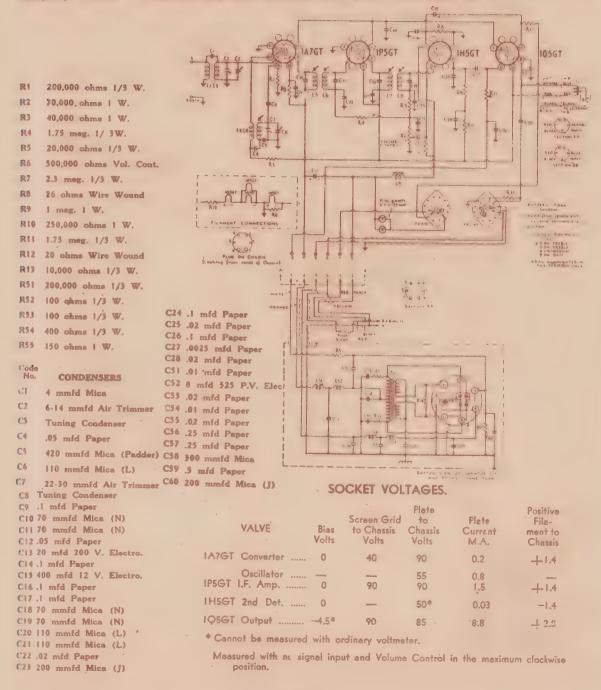
FISK RADIOLA 282 (Continued)



FISK RADIOLA 502-VZ

4 Valve, One Band, Vibrator Operated Superheterodyne

TUNING RANGES: 1600-550 Kc/s. R.F. ALIGNMENT SETTINGS: 600 Kc/s. (L.F. Osc.) 1500 Kc/s. (H.F. Osc. and Aer.). INTERMEDIATE FREQ.: 455 Kc/s. BAT FERY: 6v. Accum. CURRENT CONSUMPTION: 0.6 amp. (Dial Lamps (OFF). REPLACEMENT FUSE: 5 amp. VALVE COMPLEMENT: 1A7GT Converter. 1P5GT I.F. Amp. 1H5GT 2nd Det., A.V.C. and A.F. Amp. 1Q5GT Output Tetrode. VIBRATOR: Type 65UT (V5809) or 65UH (V2511). LOUDSPEAKER: (Permanent Magnet) 7 inch. UNDISTORTED POWER OUTPUT: 250 milliwatts.



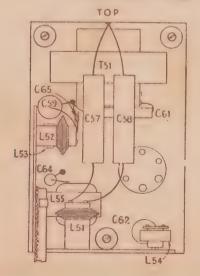
FISK RADIOLA 703 & 277

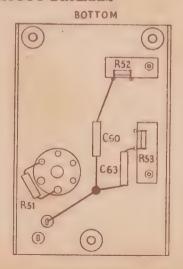
6 Valve, Seven Band, Battery Vibrator Operat perheterodynes

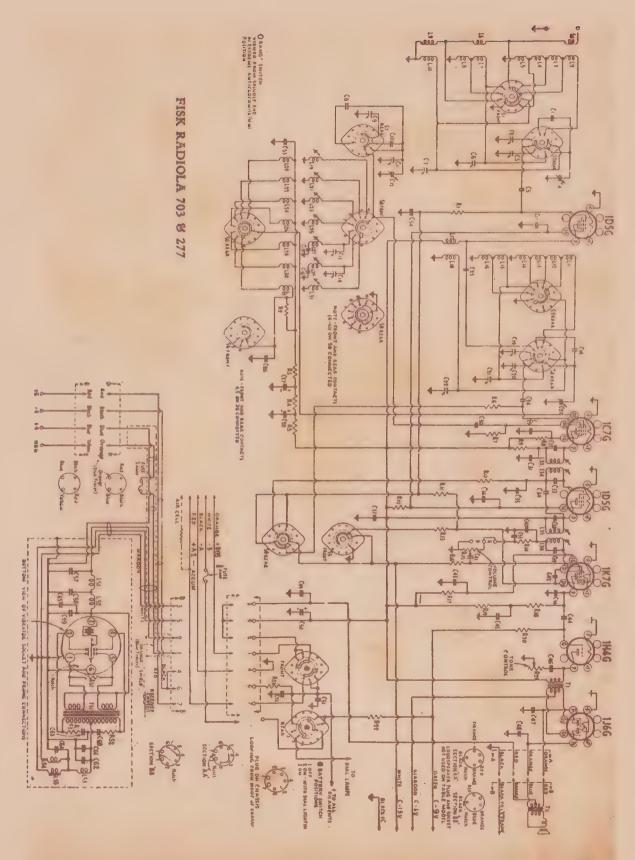
INTERMEDIATE FREQ.: 455 K.C. CURRENT CONSUM. ION: "A" Battery at 2 Volts (Battery Operation) - 0.66 amp. "B" Battery 5. 1.5 volts (Battery 'Operation) - 17-20 ma. "A" Battery at 6 volts (Vi: Yor Operation) - 1.2 amp VALVE COMPLEMENT: (1) 1D5G R.F. amp. (2) 1C7G converter. (3) 1D5G - I.F. amp. (4) 1K7G 2nd det. A.V.C. and A.F. Amp. (5) 1H4G Audio Amp. (6) 1J6G Class "B" Output. LOUDSPEAKER: 7" and 12".

CIRCUIT CODE - Abbreviations - w -ohms. W - Watt. Sil. - Silvered. R1 -1w 1/3W C2 -5-50mmfd Mica Cl8-53mmfd Sil. C41- .Olmfd pap. R2 -30.000w lW Trimmer mica C42-50mmfd mica C3 -5-50mmfd Mica C19&20-3-30mmfd C43-.1 mfd paper R3 -500w 1/3W Mica trim. C44- .05mfd paper R4 -500w 1/3W Trimmer C21&22-3-30mm fd C45- .5mfd paper R5 -500w 1/3W C4 -Tuning Cond. mica trim. C46-.035mfd paper R6 -lmeg.1/3W C5 -200mmfd S11. C23-Tun.Cond. C47-.005 mfd paper Mica R7 -50,000w 1/3W C24-200mmfd Sil. C48-.005 mfd paper R8 -40.000w lW C6.&C7-5-50mmfd mica C49-450mmfd mica R9 -300w 1/3W Mica Trimmer 025-50mmfd 311. C50-8mfd 525V R10-100.000w 1/3W C8 -40mmfd Temp. mica electro Rl1-1.75 meg.1/3W Compensated C26-. lmfd paper C51-450mmfd mica C9 -11-29mmfd R12-60.000W 1W C27&28-8mfd ai: trimmer C52-.5mfd paper R13-2.3 meg.1/3W 500V elec. C53-.1 mfd paper R14-50.000w 1/3W Clo-490mmfd mica C29-.lmfd pap. Padder C54- .O5mfd paper R15-500.000w V.C. C30-70mmfd Sil. C55- 110mmfd mica Cll-2-lommfd air R16-1.75 meg.1/3W mica rimmer C56- 200 mmfd R17-1 meg. 1W 031-.05mfd pap. C12-Turing Cond. mica R18-200,000w 1W C32&33-70mmfd Cl3-2-20mmfd air C57-.25mfd paper R19-50,000w lW-Sil. mica trimmer C58-.25mfd paper R20-500.000w 1/3W C34-4mmfd mica C14-11-29mmfd C59-.5mfd paper R21-100.000W T.C. C35-.Olmfd pap. air trimmer C60-.015mfd paper R22-900w 1W C36-. lmfd pap. C15-2550mmfd C61-.Olmfd paper R23-5.5w Wire /Wd. C37-.5mfd pap. mica padder C62-8mfd 525PV R51-400w 1/3W C38-70mmfd Sil. C16-1400mmfd C63-.015mfd paper R52-100w 1/3W C39mica mica padder C64-.Olmfd paper R53-100w 1/3W C40-110mmfd C17-.lmfd pap. C65-300mmfd mica Cl -53mmfd Sil.Mica mica

VIBRATOR POWER UNIT LAYOUT DIAGRAM







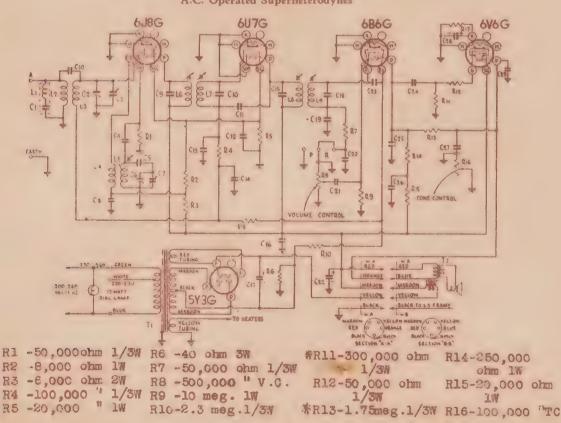
FISK RADIOLA 703 & 277 (Continued)

NOTE: For Conversion from "B" Battery to Vibrator Power Unit Operation refer to instructions contained in Model 275 in this book with the following addition to (b) In the Table Model cabinet place unit on floor rear Set. CONVERSION FROM VIB.POWER UNIT TO BATTERY OPERATION - (s) lisconnect and remove the Unit. (b) Connect the battery cable to plug chassis, not forgetting to insert tip attached to cable in receptacle idiacent to plug, and connect batteries.

SOCKI	ET VOLTAGES	•	Grid to Chassis	Screen Grid to Chassis	Plate to	Plate	70.7
	VALVE		Volts	Volts		Current	Filament
1050	R.F. Amp.		+ *	45	Volts	M.A.	Volts 2.0
	Converter	M.W.	-1.5*	55	135	1.8	2.0
		S.W.	min.	55	135	2.2	
	Oscillator				70	2.2	
		S.W.	-	_	130	3.5	
1D5G	I.F. Amp.		+*	45	135	2.0	2.0
1K7G	Det.& A.F.	Amp.	-1.5*	30 ₩	60 #	0.25	2.0
1H40	A.F. Amp.		-9 *		130	3.0	2.0
1J6G	Output		-3	_	135	3.5	2.0

Cannot be measured with ordinary voltmeter. T-1.5 volts bias on Medium Wave & 75-200 M. bands. Zero bias on remaining bands. Measured with no signal input. Volume control at maximum.

FISK RADIOLA 505, 95, 603 & 315 5 Valve, One Band (505) and Two Band (95, 603, 315), A.C. Operated Superheterodynes



FISK RADIOLA 505 (Continued)

	50 ohm 3W	06 -11-29mmfd ai	r C15-70mmfd 311.	C22-16mfd 350V
R18-1	.75meg.1/3W	trimmer	Mica	Reg. elect.
G1 -5	Sommfd Sil.	C8 O5mfd paper	· Cl6lmfd pap.	C2402mfd paper
	Mica	09 -70mmfd Sil.	C17-16mfd 525PV	C25-200 mmfd mica
C2 -2	-20mmfd air	mica	elec.	C265 mfd paper
	trimmer	Clo-70mmfd Sil.	C18-70mmfd s11.	#C27lmfd paper
C3 -T	hining cond.	mica		C28- 25mfd 25V
C4 -7	Ommfd mica	Cll-4mmfd mica	C19-110mmfd mica	
C5 -4	90mmfd mica	C12lmfd paper	C20-110mmfd mica	
	padder	0130lmfd pap.	C21Olmfd paper	o-o-o-o-o-o-o-o-o-o-o-o-o-o-o-o-o-o-o-
C7 -T	uning Cond.	Cl405mfd pap.	C23-50mmfd mica	
au. Q	ee Circuit Mc	dification.		

Tuning Ranges of these Models: "Short Wave" 13.6-43M. "Standard Medium Wave" -1600-550 K.C. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave"-600 K.C. (Osc.), 1500 K.C. (Osc. & Aer). "Short Wave" -15M. (Osc. & Aer.) INTERMEDIATE FREQ.: 455 K.C. POWER CONSUMPTION: 75 Watts.

CIRCUIT MODIFICATION.

A modification to the Tone Control circuit which took effect from 4/4/41, was made to the sets concerned in this group. The circuit diagrams shown are those used in the first production period and the accompanying diagram shows the circuit arrangement adopted after the above date. The components not coded in the diagram were not affected.

R1 - 100,000 ohms 1/3W R2 - 390,000 ohms 1/3W

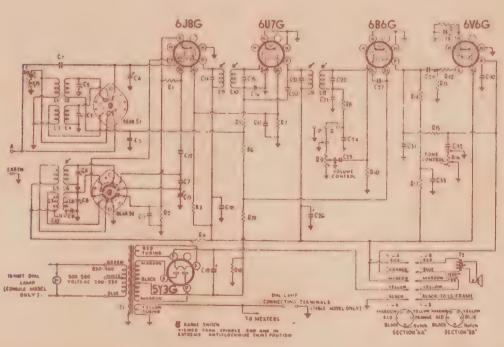
Cl - 1500 mmfd mica

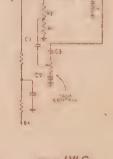
C2 -.00 amfd paper

C3 -. Ofmfd paper

C4 - .0025 mfd

FISK RADIOLA 95 & 603





FISK RADIOLA 95 & 603 (Continued)

Rl	-50,000 ohm	#R13 -300,000 ohm	C6-11-29mmfd air	C20-4mmfd mica
	1/3W	1/3 Watt	trimmer	C21-70mmfd Sil.
R2	-350 ohm $1/3W$	R14-250,000 ohm	C7 -490mmfd mica	mica
R3	-25,000 ohm	1 Watt	padder	C22-70mmfd Sil.
	2 Watt	%R15 -1.75 meg.	C8 -2-10mmfd air	mica
	-25,000 ohm	1/3 Watt	trimmer	C23-110mmfd mica
	1 Watt	R16-100,000 ohm	C9 -4000mmfd mica	C24-110mmfd mica
	-100,000 ohm	Tone Control	padder	C25Olmfd paper
	1/3 Watt	R17-20,000 ohm	Clllmfd paper	C26-16mfd 350V
R6	-1.75 meg. 1/3W		C12- 70mmfd mica	reg.electro
R7	-20,000 ohm	R18-40 ohms 3W	Cl3-Tuning Cond.	C27-50mmfd mica
	1 Watt	R19-2.3 meg.1/3W	C14-70mmfd S11.	C28-25mfd 25V
R8	-50,000 ohm	C1 -4mmfd mica	mica	elect.
	1/3 Watt	C2 -2-2cmmfd air	C15-70mmfd S11.	C2902mfd pap.
R9	-500,000 ohm	trimmer	mica	0300025mfd pap.
	Vol.Cont.	C3 -6-24mmfd air	Cl6Olmfd pap.	C31-200mmfd mica
Rlo	0-10 meg. 1W	trimmer	Cl7lmfd pap.	#C32lmfd pap.
R13	1- 250 ohm 3W	C4 -Tuning Cond.	Cl8lmfd pap.	C335mfd pap.
R12	2-50,000 ohm	C505mfd pap.	C19-16mfd 525V	C34-50mmfd Sil.
	1/3 Watt	CloO5mfd paper	elect.	mica

x See circuit modification, previous page

SOCKET VOLTAGES (Model 505)

VALVE	Cathode to Chassis Volts	Grid to Chassis Volts	Grid to Chassis		Plate Current	Heater
6J8G Converter	0	-3.0¥	Volts 85	Volts 265	M .A . 1.0	Volta 6.3
Osc.			-	140	5.0	es es
6U7G I.F. Amp.	0	-3.0*	85	265	6.0	6.3
6B6G Det.	Q.	0	-	130*	0.5	6.3
6V6G Output	13.0	0	265	250	47	6.3
5Y3G Rectifier	800/400	Volts.	75 M.A.	Total Cu	rrent.	

Voltage across loudspeaker field - 120. *Cannot be measured with ordinary voltmeter. Measured at 240 volts A.C. supply. No signal input. Volume at meximum.

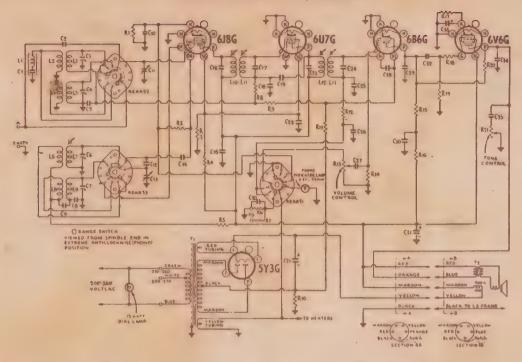
SOCKET VOLTAGES (Models 95-603, 315) 5)

		Cathode to Chassis Volts	Control Grid . to Chassis Volts	Screen Grid to Chassis Volts	Plate to Chassis Volts	Plate Current M.A.	Heater Volts
6J8G Conve	rter M.W.	0	-3.0*	85	265	1.0	6.3
	S.W.	3.0	0	85	265	1.2	6.3
080.	M.W.	-	_	1 - T	140	5.0	
	S.W.	-	-	-	140	5.0	-
6U7G I -F.	emp.	0	-3.0*	85	265	6.0	6.3
6B6G Detec	ter	O	0	-	130 *	0.5	6.3
6V 6G Outpu	t	13.0	-	265	250	47	6.3
5Y3G Recti	fier	800/40	o volts,	75 M - A -	Total Cur	rent.	
11-74	amage Ton				0		2.4.2.

Voltage across loudspeaker field - 120. * Cannot be measured with ordinary voltmeter. Measured at 240 volts A.C. supply. No signal in-

put. Volume at maximum.

FISK RADIOLA 315 (Continued)



R1 -350 ohm 1/3W	R15-250,000 ohm	C6 -11-29mmfd air	C21-16mfd 525V
	lw	trimmer	electro
1/3 Watt	R16-20,000 ohm 1W	C7 -2-10mmfd air	C23-70mmfd sil.
R3 -20,000 ohm 1W	R17-250 ohm 3W	trimmer	mica .
R4 -25,000 ohm 2W	R18-50,000 ohm	C8 -4000mmfd mica	C24-70mmfd s11.
R5 -25,000 ohm 1W	1/3 Watt	padder	mioa
	R19 -300,000 ohm	C9 O5mfd paper	C25-llommfd mica
	1/3 Watt	Clolmfd paper	C26-110mmfd mica
R7 -20,000 ohm	R20 -1.75 meg.	Cll- Tun . Cond .	C27Olmfd paper
1/3 Watt	1/3 Watt	Cl2-490mmfd mica	C28-50mmfd mica
R8 -100,000 ohm	R21-100,000 ohm	padder	C29-200mmfd mica
1/3 Watt	Tone Cont.	Cl3-Tun .Cond .	C305mfd paper
R9 -1.75meg.1/3W	Cl -50mmfd Sil.	Cl4-70mmfd mica	C31-16mfd 350V
R10-40 ohm 3W	Mica	Cl5lmfd paper	reg.elec.
R11-2.3 meg.1/3W	C2 -4mmfd mica	C16&17-70mm fd	C3202mfd paper
R12-50,000 ohm	C3 -2-20mmfd air	Sil.mica	C33-25mfd 40V
1/3 Watt	trimmer	C18Olmfd paper	elec.
R13-500,000 ohm	C4 -6-24mmfd air	Cl9-4mmfd mica	C340025mfd pap.
Vol.Cont.	trimmer	C20Olmfd paper	+C35lmfd paper
R14-10 meg. 1W	C5O5mfd paper	CZ2lmfd paper	• •
tra an	-21 Ot - shi su / Asmble	on book in this co.	att can l

*See Circuit modification (further back in this section)

FISK RADIOLA 701, 702, 276 & 316

6 Valve, Seven Band, A.C. Operated Superheterodynes

INTERMEDIATE FREQ.: 455 K.C.

POWER SUPPLY RATING: Model 702 - 95/110 - 110/125 -190/220 -220/250

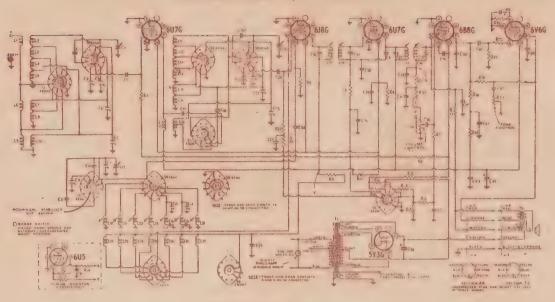
Volts A.C. 40-60 cycles. Models 701,276 & 316 - 200/260 Volts A.C.

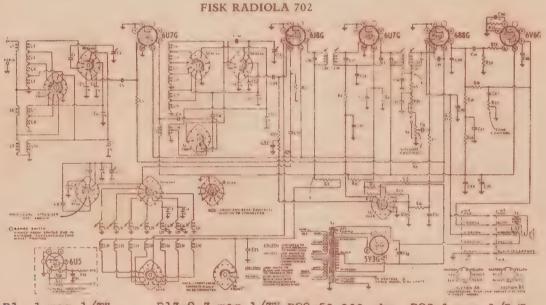
50-60 cycles. POWER CONSUMPTION: 80 Watts

LOUDSPEAKER: Models 701 & 702 - 7". Models 276 & 316 - 12"

UNDISTORTED POWER OUTPUT - 4.2 watts.

FISK RADIOLA 701, 276 & 316





R1 -1 meg .1/3W R2 -50,000 ohm 1/3W R14-11 ohms 3W R3 -100,000 " R4 -20,000 ohm 1W R5 -50.000 ohm 1/3W R6 -500,000 ohm V.C R7 -1.75 mag.1/3W R8 -1.75 mag.1/3W R9 -20,000 dim 2W R10-15,000 ohm_1W R11-20 ohms 3 Watt R12-20 ohms 3 Watt

R15-20 ohms 3W R16-500,000 ohm ·1/3 Watt R17-1.5 meg.1W R18-200,000 chm 1 Watt R19-3 meg.1% R20-500,000 chm 1/3 Watt R21-250 ohms 3W

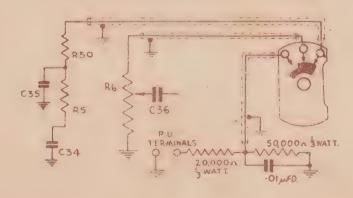
R13-2.3 meg.1/3W R22-50,000 ohm R29-1 meg.1/3 W 1/3 Watt R30-50,000 ohm R23-100,000 ohm 1/3 Watt (Console Tone Cont.Cl -53mmfd Sil.mica R24-50,000 obm C2 -5-50mmfd mics 1. Watt trimmer R25-1 meg.1/3W C3 -5-50mmfd mica R26-1 meg. 1W . trimmer R27-20,000 ohm C4 -Tuning cord. C5 -2 commfd sil. 1 Watt mica R28-1.75 meg. 1/3 Watt

FISK RADIOLA 701, 702, 276 & 316 (Continued)

C6 -5-50mmfd mica	C16-1350mmfd mica		C38-16mfd 525V
trimmer	pad.	mica	elec.
C7 -5-50mmfd mica	C17-200mmfd sil.	C28Olmfd pap.	C39-50mmfd mica
trimmer	mica	C29lmfd pap.	C40-200mmfd mica
UB -40mmfd temp.	C18-50mmfd sil.	03005mfd pap.	C4102mfd pap.
compensated	mica	C31-4mmfd mica	C42lmfd pap.
09 -11-29mmfd air	C19-3-30mmfd mica		C435mfd paper
trimmer	trim.	mica	C44lmfd paper
Clo-490mmfd mica	C20-3-30mmfd mica		
bad.	trim.	OOO I CAMELLO DELL	C45-16mfd 350
C11-2-l0mmfd air	C21-3-30mmfd mica	mica	reg.elec.
		694-90mild mics	C46-25mfd 25V
trimmer	trim.	(Cons.)	elec
Cl2-Tun.cond.	C22-3-30mmfd mica		C47lmfd pap
Cl3-2-20mmfd air	trim.	(Table)	C480025mfd pap
trimmer	C23-Tun.cond.	C35-30mmfd mica	(Console)
Cl4-11-29mmfd air	024-70mmfd sil.	(Console)	C48015mfd pap
trimmer	mica.	C35-110mmfd mica	(Table)
C15-2550mmfd mica	C25lmfd paper	(Table)	C49-200mmfd Sil.
pad.	C26-70mmfd sil.	C3602mfd pap.	mica
*****	mica	C37lmfd pap.	C50-53mmfd sil.
	C5205mfd pap.	C5105mfd pap.	mica
coampo Holm Admo			
SOCKET VOLTAGES.		20.00	
		de Screen	
	Grid to to		
		is Chassis Chassis	
	Volts Volt	s Volts Volts	M.A. Volts
6U7G R.F. Amp.	-3.9		7.0 6.3
	-W3.9 0	100 255	0.8 6.3
	.W4.5 O	100 255	0.6-0.8 -
Osc.		- 150	5.0 -
6U7G I.F. Amp.	-3.9 0	100 255	7.0 6.3
6B8G Detector	-1.5 0	30 125	0.5 6.3
6V6G Output	0 12.5	255 · 245	44.0 6.3
5Y3G Rectifier (Ma	ntel) 700/350V. 80	M.A. Total curren	t drain 5.0
	nsole)800/400V 80		
	red with ordinary		ed with Receiver

Cannot be measured with ordinary voltmeter. Measured with Receiver connected to 240 volts A.C. supply. Volume Control at maximum. No signal input.

Phono.pick-up Circuit for 316

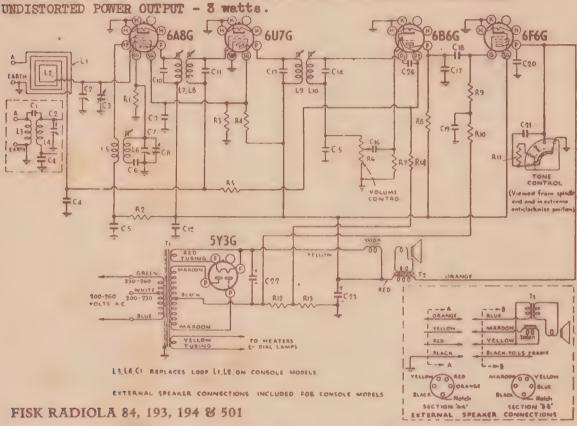


Switch viewed from spindle end in Radio (Clockwise) Position.

FISK RADIOLA 84, 193, 194, 501 & 310

5 Valve, One Band, A.C. Operated Superheterodynes

TUNING RANGE: "Standard Medium Wave" - 1600-550 K.C. R.F. ALIGNMENT SET-TINGS: 600 K.C.(Osc.), 1500 K.C. (Osc. and Aerial). INTERMEDIATE FREQ.: -455 K.C. POWER CONSUMPTION: 60 watts. VALVE COMPLEMENT: (1) 6A8G -Freq. Converter. (2) 6U7G I.F. Amp. (3) 6B6G 2nd Det. A.V.C. and A.F. Amp. (4) 6F6G Output Pentode. (5) 5Y3G Rectifier. LOUDSPEAKER: Model: 84 - 5" Model 193 and 501 - 12". Model 194 - 7". Model 310 - 7". Field Coil Resistance: Model 84 - 1000 ohms. Models 193,194,501,310 - 2000 ohms.



R1 -50,000 ohm 1/3W
R2 -20,000 ohm 1W
R3 - 30,000 ohm 1W
R4 -20,000 ohm 2W
R6 -1.75 meg.1/3W
R6 -500,000 ohm
Volume Control
R7 -10 meg. 1W
R8 -250,000 ohm 1W
R9 -500,000 ohm 1/3W
R10-25,000 ohm 1/3W
R11-5000 ohm 1/3W
R12-250 ohm 3W
R13-50 ohms 3W
R14-1.75 meg.1/3W

(Console only)
C2 - 6-14mmfd air trim.
C3 - Tuning Cond.
C4 -.05 mfd paper
C5 -.05mfd paper
C6 -420mmfd mica
(padder)
C7 -16-24mmfd air trim.
C8 -Tuning condenser
C9 -.lmfd paper
C10-70mmfd mica (N)
C11-70mmfd mica (N)

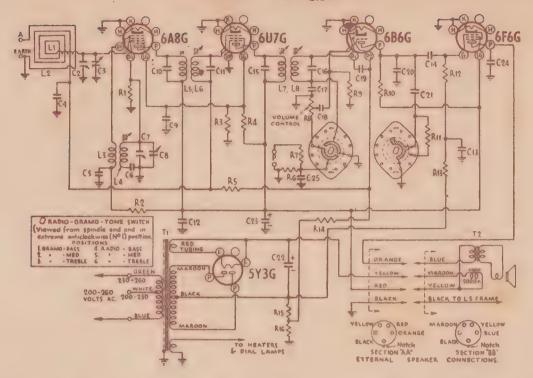
Cl -4 mmfd mica

C12-. Infd paper

C13-115mmfd mica (A)

C14-115mmfd mica (A)
C15-110mmfd mica (L)
C16-.01mfd paper
C17-350mmfd mica
C18-.01mfd paper
C19-.035mfd paper
C20-.02mfd paper
(Mantel)
C20-.005mfd paper
(Console)
C21-.035mfd paper
C22-8mfd 500V electro
C23-8mfd 525V electro
C24-50mmfd mica (D)

FISK RADIOLA 310



R1 -	50,	000	ohms	1/3W

R2 - 20,000 ohms IW

R3 - 30,000 ohms 1W

R4 - 20,000 ohms 2W R5 - 1.75 meg. 1/3W

R6 - 50,000 ohms 1/3W

R7 - 50,000 ohms 1/3W

R8 - 500,000 ohms Vol.

Control

R9 - 10 megohms IW

R10- 250,000 ohms IW

R11- 30,000 ohms 1/3W

R12- 500,000 ohms 1/3W

R13- 25,000 ohms 1/3W

R14- 1.75 megohms 1/3W

R15- 250 ohms 3W

R16- 50 ohms 3W

Cl - Deleted

C2 - 6-14mmfd air trim.

C3 - Tuning oondenser

C4 - . C5mfd paper

C5 - .O5mfd paper

C6 - 420mmfd mios

(padder)

C7 - 16-24 mmfd air

trimmer

C8 - Tuning condenser

C9 - .lmfd paper

Clo- 70mmfd mios (N)

Cll- 70mmfd mica (N)

C12- .lmfd paper

C13- .035mfd paper

Cl4- .Olmfd paper

C15- 115 mmfd mica (A)

C16- 115 mmfd mica (A)

C17- 110 mmfd mica (L)

C18- . Clmfd paper

C19- 50 mmfd mica (D)

C20- 350 mmfd mica

C21- . Clmfd paper

C22- 8mfd 500V electrolyt.

C23- 8mfd 525V electrolyt.

C24- .Olmfd paper

C25- .0025 mfd raper

SOCKET VOLTAGES (84).

VALVE.	Control Grid to Chassis Volts.	Screen Grid to Chassis Volts,	Plate to Chassis Volts.	Plate Current M.A.	Heater Volts.
6A8G Detector	-3*	95	240	3	6.3
Oscillator	_	-	160	4	-
6U7G I.F. Amp.	-3°	95	240	8.5	6.3
6B6G 2nd Det.	0		120*	0.5	6.3
6F6G Pentode /	-17°	240	225	. 30	6.3
5Y3G Rectifier	640/320 v	olts, 60	M.A. Tota	current	t, 5.0.

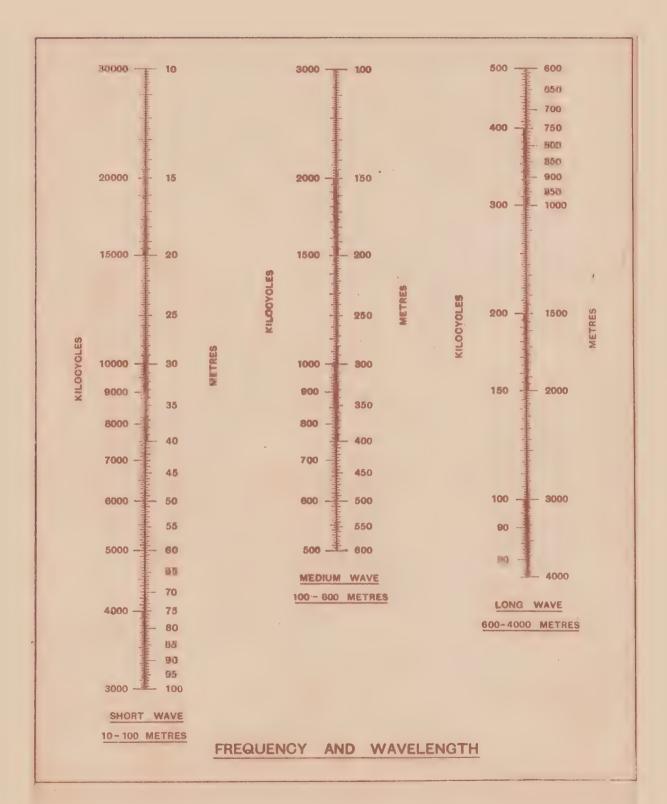
Voltage across loudspeaker field—60 volts. * Cannot be measured with ordinary voltmeter.

SOCKET VOLTAGES (193, 194, 501 and 310).

VALVE.	Gricl to Chassis Vol ts.	Grid to Chassis Voits.	Plate to Chassis Volts		leater folts.
6A8G Detector	-3*	95	240	3	63
Oscillator	_		160	4	marin.
6U7G I.F. Amp.	-3°	95	240	8-	6.3
6B6G 2nd Det.	0	_	120*	0.5	6.3
6F6G Pentode	-17*	240	225	30	6.5
5Y3G Rectifier	740/370	volts, 60	M.A Tota	current,	50

Voltage across loudspeaker field-120 volts.

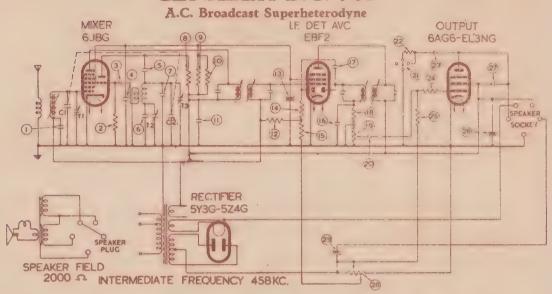
^{*} Cannot be measured with ordinary voltmeter.



GENALEX RADIO

Manufactured by British General Electric Co. Ltd., Sydney, N.S.W.

GENALEX B.C. 701



11 mfd	111 mfd	200		Cl -	Aerial Sect	tion
2. 50,000 ohms	125 megohm		e Cont.	-0	Gang	0
3. 50 mmfd	13. 8 mfd		00 ohms	62 -	Oscillator	Section
41 mfd	14. 1 meg ohm	230			Gang	'
5. 420 amfd	155 megohm	- 1	,000 ohms		Aerial Air	
6. 375 mmfd	1600025 mfd		megohm		trimmer	
7. 15 mmfd	1700005 mfd	26. 12		T2 -	Padd. air	
8. 20,000 ohms	18. 50,000 ohm	2700			trimmer	
	195meg ohm	28. 25		T3 -	Oscillator	air
10.40,000 ohms	Vol. C.	29. 8 r	nfd		triumer	
VALVE FUNCTION			EP ESG	EG	EAG	IAG
~J8G Mixer	6.3	245	2 110	2.5	150	3.5
EBF2 I.F. Det.	AVC 6.3		.2 110	2.5	en .	44
ELSN Output	6.3	230	25 245	6.5	-	-
524G Rectifier	5.0				-	-
	GEN	ALE	X B.C.	706		

A.C. Operated Superheterodyne Broadcast Reception

RP TP

RSG RG

EAG

TAG

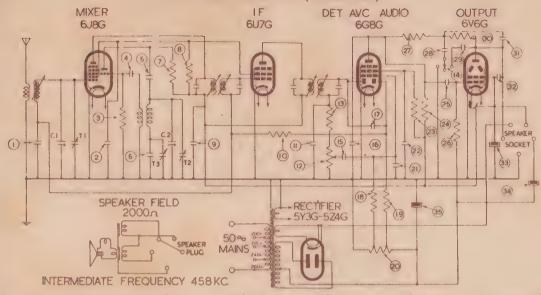
	E 001000001		-	and on	adds 40	TOTAL CIT	93705	T-MAN-CO	2020
6J8G	Mixer		6.5	225	1.2	90	3.0	140	4.5
607G	I.F. Amp.		6.3	225	6.5	20	5.0	80	
6G8G	Det . AVC /	udio	6.3	60	0.5	25	1.0	-	-
6V6G	Output		6.3	210	33	225	14.0	-	_
5 73 G	Rectifier		5.0	-	-	-		-	-
11 mfd		10. 1 megohm		19	. 1 me	gohm		28.	420 mmfd
21 mfd		1100025 mf	d		. 250	-		29.	•Ol mfd
3. 50,000	ohma	125 meg V.	C			25 mfd			3 meg.
4. 50 mmfd		131 megohn			1 m				15 mmfd
5. 420 mmf		14. Tone Cont				meg oh	m		.004 mfd
6. 390 mmf		1501 mfd			5 π	-			12 mfd
7. 20,000		160001 mfd				mfd :			8 mfd
8. 30,000		17. 50 mmfd	•			egohm			25 mfd
91 mfd		18. 2 megohm			. 1 me	-		501	no and th
		ro. s megorini		61	. 4 1110	Roim			

EF

FUNCTION OF VALVE

VALVE

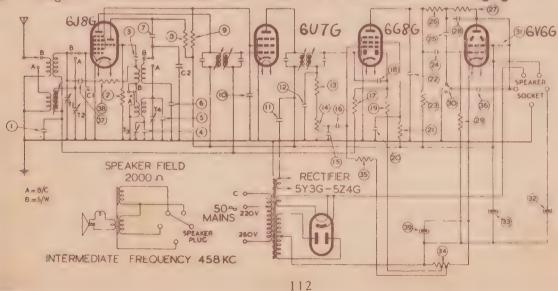
GENALEX B.C. 706 (Continued)



Cl - Aer. section gang. C2 - Osc. section gang. Tl - Aer. air trimmer. T2 - Osc.air trimmer. T3 - Padd. air trimmer

GENALEX B.C. 710

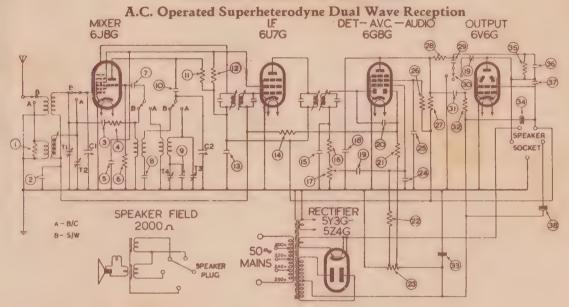
	A.C. Operated Superhetero	dyne Dual Wave Reception	
ll mfd	145meg ohm	26. 1 megohm	39. 10 mfd
2. 50,000 ohma	Vol.Cont.	27. 8 megohm	Tl - SW aer air
300005 mfd	1500025 mfd	28. 15 mmfd	trimmer
4. 375 mmfd	1601 mfd	29. 5 megohm	T2 - BC aer air
5. 15 mmfd	17. 1 megohm	30. Tone Control	trimmer
601 mfd	18. 50 mmfd	31004 mfd	T3 - Padder air
7. 420 mmfd	19. 1 megohm	32. 8 mfd	trimmer
8. 20,000 ohms	201 mfd	33. 12 mfd	T4 - BC osc. air
9. 30,000 ohms	21. 2.5 megohm	34. 250 ohms	trimmer
101 mfd	220001 mfd	35. 2 megohm	Cl - aer. section
111 mfd	235 megohm	3601 mfd	gang
1200025 mfd	2402 mfd	37000002 mfd	C2 - Osc. section
131 megohm	25. 420 mmfd	38. 2000 ohms	gang
			V9~~~~ (27)



GENALEX B.C. 710 (Continued)

VALVE	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
6J8G	Mixer	6.3	215	1.0	90	5.0	125	4.0
6U7G	I.F. Amp.	6.3	215	5.0	90	5.0	me .	
6G8G	Det. AVC audio	6.3	20	0.5	15	1.0	40	ein .
6V6G	Output	6.3	200	30	215	13.0	-	-
574G	Regtifier	5.0	-	100	-	60	-	-

GENALEX B.C. 711



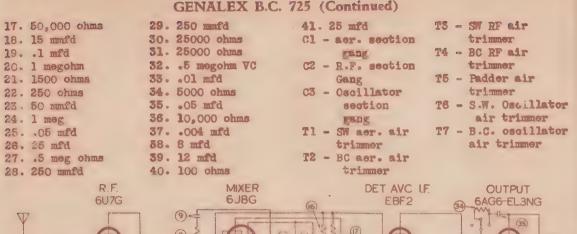
INTERMEDIATE FREQUENCY 458 KC

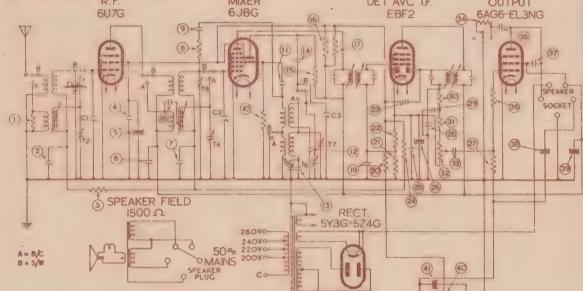
1. 10,000 ohms 21 mfd 3. 2 mmfd 4. 1000 ohms 5. 1 mfd 6. 50,000 ohms 7. 50 mmfd 801 mfd 9. 390 mmfd 10. 420 mmfd 11. 20,000 ohms 12. 30,000 ohms 131 mfd	14. 1 megohm 15. 250 mmfd 16. 1 megohm 175megohm V.C. 180001 mfd 1901 mfd 20. 50 mmfd 21. 1 megohm 22. 2 megohm 23. 250 ohms 2400025 mfd 261 mfd 26. 2.5 megohm	28 29 30 31 32 33 34 36 36 37	. 5 megohm 420 mmfd Tone Con . 02 mfd . 5 meg 25 mfd . 12 mfd . 3 megohm . 15 mmfd . 004 mfd . 8 mfd - aer sec	T1 T2 T3	gang - SW e trin - B/C trin - B/C air	mor air mor aer air mor oscillate trimmor padder as	
VALVE FUNCTION 6J8G Mixer 6U7G I.F. Amp 6G8G Det. AVC 6V6G Output 5Y3G Rectifie	Audio	6.3 6.3 6.3 21	EP IP 1.2 1.2 6.5 6.0 0.5 83 B.C. 7	ESG 90 90 25 225	EG 3.0 3.0 1.0 14.0	EAG 140	IAG 4.5

A.C. Operated Superheterodyne Dual Wave Reception

1. 10,000 ohms 205 mfd 31 megohm 13. 390 mmfd	41 mfd 5. 12 mfd 61 mfd 14. 420 mmfd	705 mfd 8. 1000 ohms 900002 mfd 15. 20,000 ohms	10. 5000 ohms 11. 50 mmfd 1201 mfd 16. 50,000 ohms
---	--------------------------------------	--	--







NTERMEDIATE FREQUENCY 458KC

VALVE	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
6U7G	R.F. Amp.	6.3	250	7	105	3.0	-	-
6J8G	Mixer	6.3	250	1.8	105	3.0	150	5
EBF2	I.F. Det. AVC	6.3	250	5.5	105	1.75	-	-
ELSN	Output	6.3	235	32	250	6.0	40	**
5Y3G	Regtifier	5.0	-	-	1	de	-	-

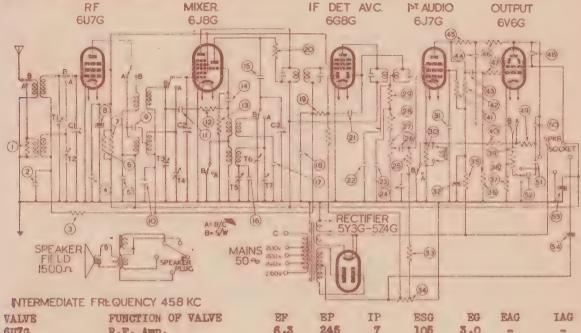
GENALEX B.C. 730

A.C. Operated Dual Wave Superheterodyne

		00 05 000 1	AR 62 61
1Ol megohm	15. 420 mmfd	29. 25,000 ohms	4301.mfd
205 mfd	16. 390 mmfd	30. 100 ohms	44. 420 mmfd
3l megohm	1701 mfd	31l mfd	45. 1 megohm
41 mfd	18. 1 mfd	32. 8 mfd	46. 3 megohm
51 mfd	19. 1 megohm	335 megohm	47. 10,000 ohms
6. 40.000 ohms	20. 20,000 ohms	34. 100 ohms	48Ol mfd
7. 40,000 ohms	21. 50 mmfd	3505 meg ohm	49. 20,000 ohms
8. 12 mfd	22 - 90 mmfd	365 megohm	505 mfd
9. 15 mmfd	23. 90 mmfd	37. 350 ohms	5105 mfd
1005 mfd	241 -mfd	38. 2000 ohms	52. 50 mmfd
11. 2 mmfd	25. 2 megohm	39 .05 mfd	53. 12 mfd
12. 1000 ohms	26, .01 mfd	40. 5000 ohms	54. 8 mfd
13. 50,000 ohms	275 meg.V.C.	41. 2.5 megohm	Cl - Aer section gang
14. 50 mmfa	28. 25000 ohms	42. 5 megohm	C2 - R.F. " "
		114	

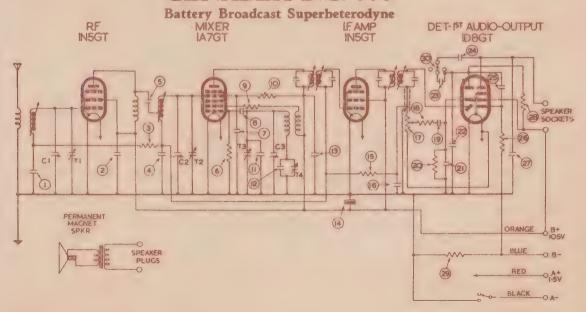
GENALEX B.C. 730 (Continued)

C3 - Osc. Section Gang Tl - SW Aer Air trim. T2 - BC Aer Air trim. T3 - SW R.F. air T4 - BC RF air trimmer T5 - Pad. Air trimmer T6 - SW Osc. " " trimmer T7 - BC Osc. air trimmer



VALVE	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
6U7G	R.F. Amp.	6.3	245	7	105	3.0	-	-
6J8G	Mixer	6.3	245	1.8	105	3.0	150	5
6G8G	I.F. Det AVC	6.3	245	7.0	105	5.0	**	_
6J7G	Audio	6.3	60	.5	40	1.0	80	-
6V6G	Output	6.5	230	35	245	13.0	-	-
573G	Rectifier	5.0	-	-	-	-	-	-
6J7G 6V6G	Audio Output	6.3	60 230	.5 35	40 245	1.0	•	

GENALEX B.C. 775

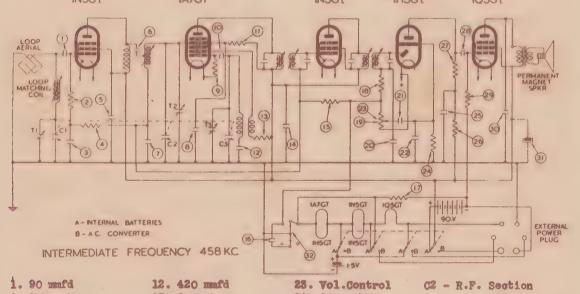


INTERMEDIATE FREQUENCY 458KC

GENALEX B.C. 775 (Continued)

e e	GLITTEDI			, — — — —				
105 mfd	12. 375 mmfd	23	000	ol mfd		. C3	- 080	illator Sec-
21 mfd	131 mfd	24	000)25 mfd			tio	n gang
31 megohm	14. 24 mfd	25	02	mfd		Tl	- Aer	air trim-
405 mfd	15. 3 megohm	26	. 2 me	gohm			mer	
5. 15 mmfd	1600025 mfd		006	~		т2		air trim-
625 megohm	175 mag. V.C			negohm			mer	
71 mfd	18 .05 megohm			ohms		ጥዌ		illator air
						10		
8. 50 mmfd	1901 mfd			Contr				mmer
9. 2000 ohms		· Ci	- Vez	. sect	ion	T4	- Pad	der air trim-
10. 50000 ohms	2100025 mfd		gar	1g		t	mer	
11. 15 mmfd	220001 mfd	Ca	- RF	Sec.ga	ng			
VALVE	FUNCTION OF VALVE	EF	EP	·IP	ESG	EG	EA	G IAG
1N5G	R.F. Amp.	1.5	105	1.25	105	-	-	-
LA7G	Mixer	1.5	105	0.8	105	_	10	0 1.5
INEG	I.P. Amp.	1.5	105	1.25	105	-	- 00	_
1D8GT	Det. AVC Audio		80	0.15				
	output	1.5	100	5.5	105	9.0		_
					777	0.0		
	GENA	LE2	V D.					

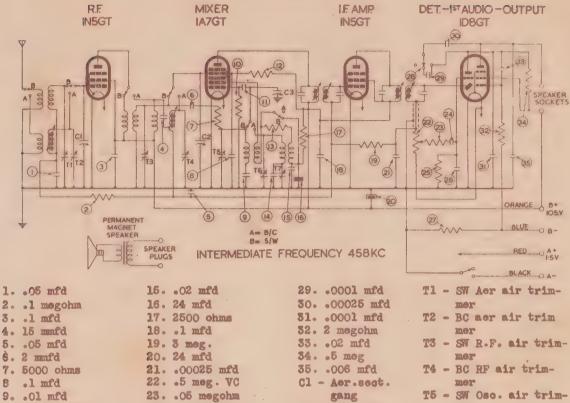
Portable Battery Superheterodyne or with A.C. Broadcast Converter Unit
RFAMP
INSGT



2. 1 megohm	13. 500 ohms		24. 4 m	egohm			gang	
305 mfd	141 mfd		251 1	nfd		C3 - Osoi	llator a	ection
41 megohm	15. 3 megohm		261 1	negohm		gang		
505 mfd	16002 mfd		271	negohm		Tl - Aeri	al air	
6. 15 mmfd	17. 750 ohms		2801	mfd		tr	immer	
705 mfd	1805 megohm		29. 2 m	egohm		T2 - R.F.	air tri	.m
805 mfd	195 megohm		3000	5 mfd		mer		
925 megohm	20. 250 mmfd	51. 24 mfd			T3 - Osoi	llator s	ir	
10. 50 mmfd	2101 mfd		32. On-	off & To	ne	tr	1mmer	
11. 50,000 ohms	22. 250 mmfd		Cl -Aer	. seo . gan	g			
VALVE	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
INSCT	R.F. Amp.	1.5	83	1	83	-		•
la7gT	Mixer	1.5	83	-4	40	-	80	1
ln5gT	I F. Amp.	1.5	83	1	83	-	-	-
1H5GT	Det AVC Audio	1.5	35	•025	-	-	-	-
105gT	Ourtement	1.5	80	3.8	88	7	_	

GENALEX B.C. 780

Battery Dual Wave Superheterodyne



5. .05 mfd 6. 2 mmfd 7. 5000 ohms 8 .1 mfd 9. .01 mfd 10. .25 megohm 11. 50 mmfd 12. 50,000 ohms 13. 500 ohms 14. 375 mmfd VALVE

IN5G la7G IN5G 1D8GT 24. .01 mfd

25. 4 meg. 26. .00025 mfd 27. 700 ohms 28. Tone Cont.

FUNCTION OF VALVE R.F. Amp. Mixer I.F. Amp. Det .AVC audio output Output

C2 - R.F. sect. gang C3 - Oso. sect. gang EF EP IP 1.5 105 1.25 1.5 105 0.8 105 1.25 1.5 30 0.15

100

5.5

mer

T6 - BC Oso. air trimmer

T7 - Padder air trimmer

ESG EG EAG IAG 105 105 100 1.5 106 105 9.0

GENALEX B.C.

1.5

Battery Dual Wave Superheterodyne

105 mfd
2. 1 megohm
31 mfd
4. 15 mmfd
5. 2 mmfd
6. 1000 ohms
725 megohm
81 mfd
905 mfd
10Ol mfd
11. 50 mmfd
12. 50,000 ohms
13. 500 ohms

15. .02 mfd 16. 24 mfd 17. 2500 ohms 18. .1 mfd 19. 3 megohm 20. 250 mfd 21. .5 meg.VC 22. .05 megohm 23. .01 mfd 24. 4 megohm 25. 250 mmfd 26. Tone Cont.

14. 390 mmfd

27. 100 mmfd 28. 250 mmfd 29. 24 mfd 30. 100 mmfd 31. 2 megohm 32. .02 mfd 33. .006 mfd

34. 700 ohms 35. .5 megohm Cl -Aer.Sect.gang C2 - RF

C3 - Osc. " Tl-SW aer air trim. T2 - B.C. aer air trimmer

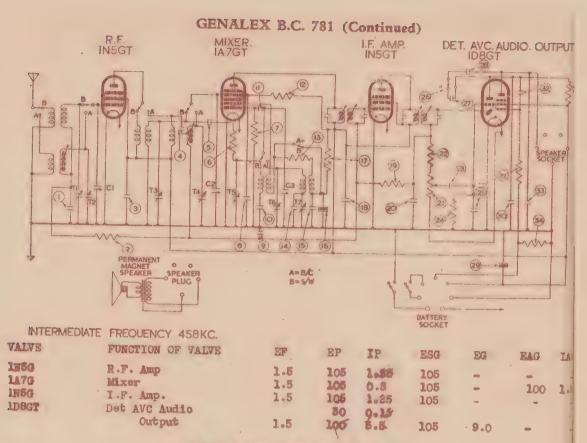
T3 - SW R.F. air trimmer

T4 - BC RF air trimmer

T5 - SW Osc. air trimmer

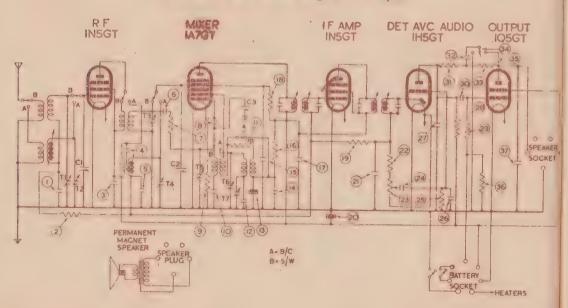
T6 - BC Osc. air trimmer

T7 - Padder air trimmor



GENALEX B.C. 786

Battery Dual Wave Superheterodyne



INTERMEDIATE FREQUENCY 458KC

GENALEX B.C. 786 (Continued)

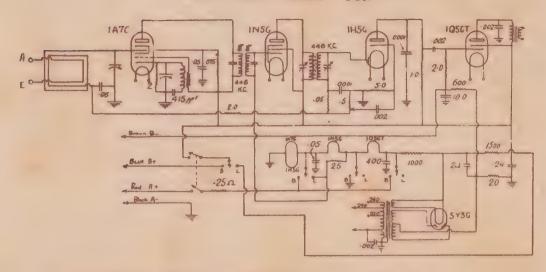
		C-2-1,122-1.			/					
105 mfd 21 megohm		.1 mfd 2500 ohms			2 megoh		7	1 -	SW aer	
31 mfd		l mfd			5 megoh		qu	ź	BC aer	
			1		_					
4. 15 mmfd		50,000 ohn	143		420 mmf			_	trimme	
505 mfd		5 meg			1.5 meg		T	3 -	SW RF	
6. 2 mmfd	20.	24 mfd		34.	Tone Co	nt.			trim	ner
7. 1000 ohms	21.	250 mmfd		35.	.Ol mfd		T	4	BC RF	air
8. 50 mmfd	22.	.05 megohn	1	36.	350 ohm	8			trimme	-
025 megoh		.5 meg.V.C		37.	.006 mf	đ	T	5 -	SW OBC	. air
1001 mfd	24.	.01 mfd		Cl -	Aer . Se	ot .gang			brimme!	ya b
11. 500 oh us		4 megohm			RF 800			6 -	BC oso	air
12. 390 mfd		250 mmfd			gang		_	•	trimme	
18 - 24 mfd		100 mmfd		C5 -	Oscill	ator	T	7 -	Padder	air
1402 mfd		.5 megohm			section				trimme	
NA O OCH WITH	80.	eo mogorne			900010	m Perrie			AS Treation	
VALVE	FUNCTION OF	VALVE	EF	EP	IP	ESG	EG		FAG	LAG
IN5G	R.F Amp.		1.5	105	1.25	106	den		GHO .	-
1A7G	Mixer		1.5	105	0.8	105			100	1.5
			1.5	105	1.25	105			=	_
ingg	I.F. Amp.									
1H5G	Det AVC Aud:	LO	1.5	35	0.1	-	-		eto .	-
1Q5G	Output		1.5	100	8.0	105	5.5		-	-

MEMORANDA

GULBRANSEN RADIO

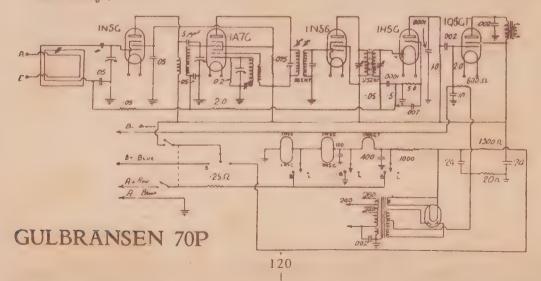
Manufactured by E. F. Wilks & Co. Pty. Ltd., Sydney, N.S.W.

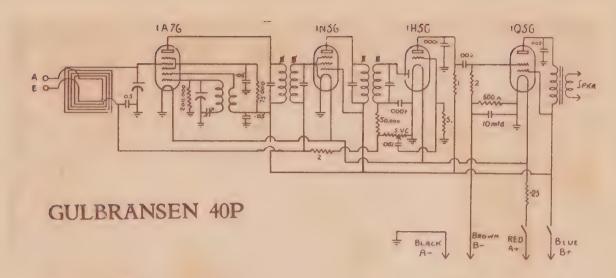
GULBRANSEN 60P

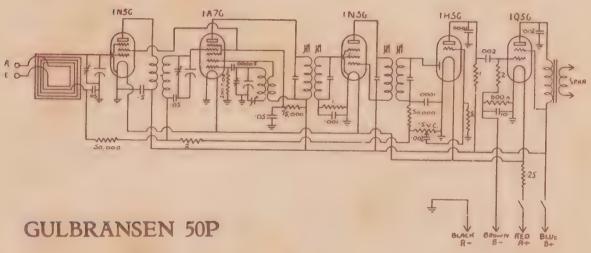


TO REMOVE CHASSIS FROM CABINET MODELS 60P & 70P

- (1) First switch receiver OFF at the volume control switch and if connected to A.C. mains, switch off at power point and remove power plug.
- (2) Draw out the batteries, disconnection is not necessary.
- (3) Disconnect leads from cabinet top to 1 and 2.
- (4) Undo the chassis fastering bolts, the heads of which are underneath the shelf.
- (5) Withdraw the chassis.
 - To refit chassis, reverse the above procedure. Take particular care that:-
- (6) Maroon lead connects to 1 and Black lead to 2.
- (7) Replace asbestos insulation between 5Y3G valve and the PR8 battery.







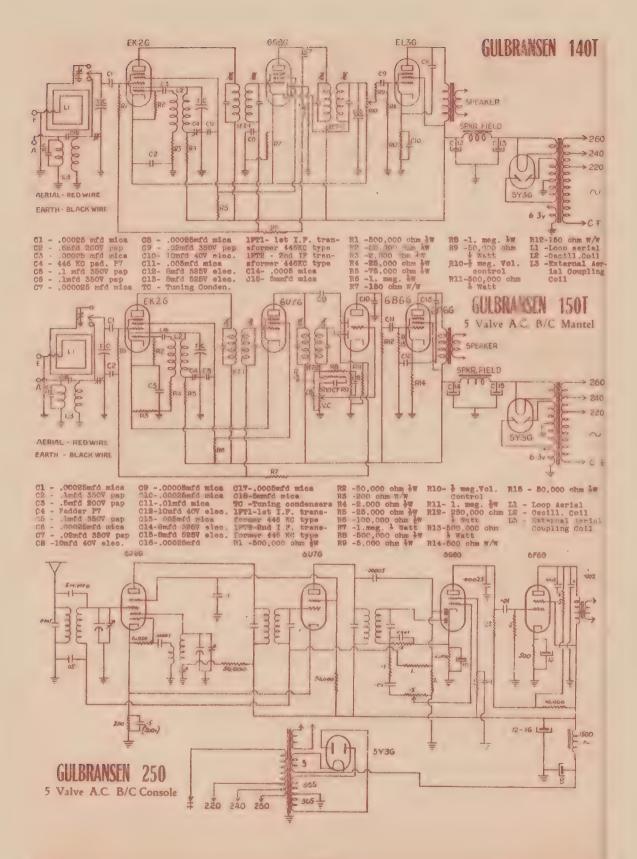
TO REMOVE CHASSIS FROM CABINET.

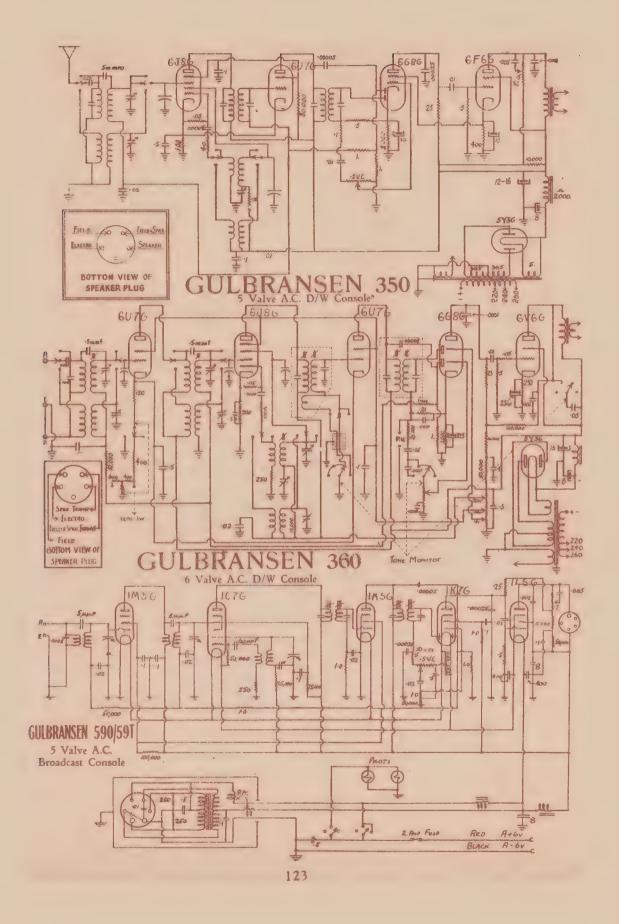
FIRST SWITCH RECEIVER OFF.

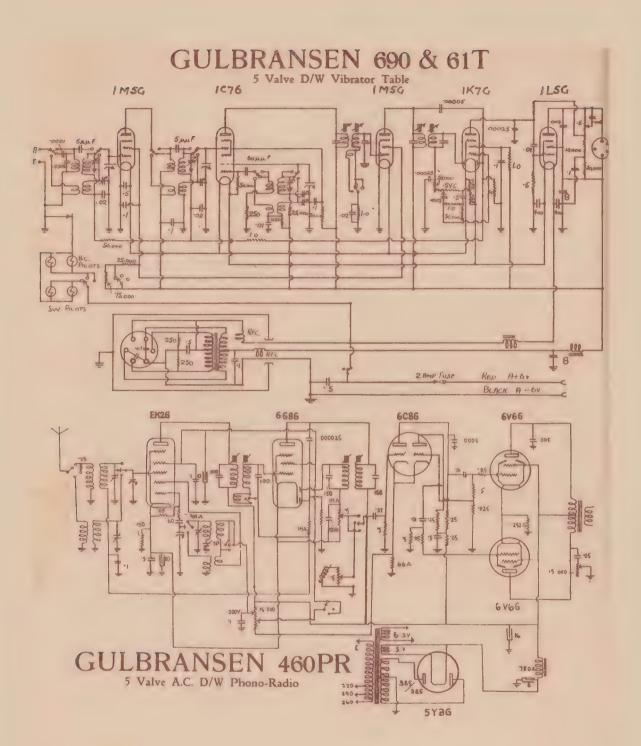
- (1) Draw out batteries. There is no need to disconnect them.
- (2) Disconnect the leads coming from the loop, these are inside the cabinet.
- (3) Undo the chassis fastening bolt, the head of which is underneath the shelf.
- (4). Withdraw the chassis.

TO REFIT CHASSIS.

Reverse the above procedure taking particular care that the leads are connected correctly.

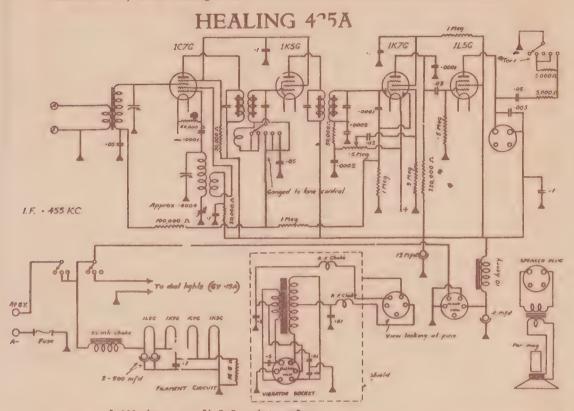






HEALING RADIO

Manufactured by A. G. Healing Ltd., 167 Franklin Street, Melbourne, C.1., Victoria



	-1	107	250V	250V	250V
VALVE	USE	FILAMENT	SCREEN	PLATE	OSC.PLATE
207G	Oso. Mod.	2	67	150	55
1K5G	I.F.	2	67	150	
1K7G	Det.AVC lat AF	2	30	45	
115G	2nd A.F.	2	150	145	`

POWER SUPPLY - 6 Volt Accumulator Freq. Range - 550-1,620 kilosyoles Intermediate Freq. - 455 kilosyoles Battery Current - 1 amp. without dial lights

Voltage measurements taken with aerial disconnected and no signal input. TRIMMERS - The aerial section of the gang is at the back.

HEALING 500E, 520E & 526E

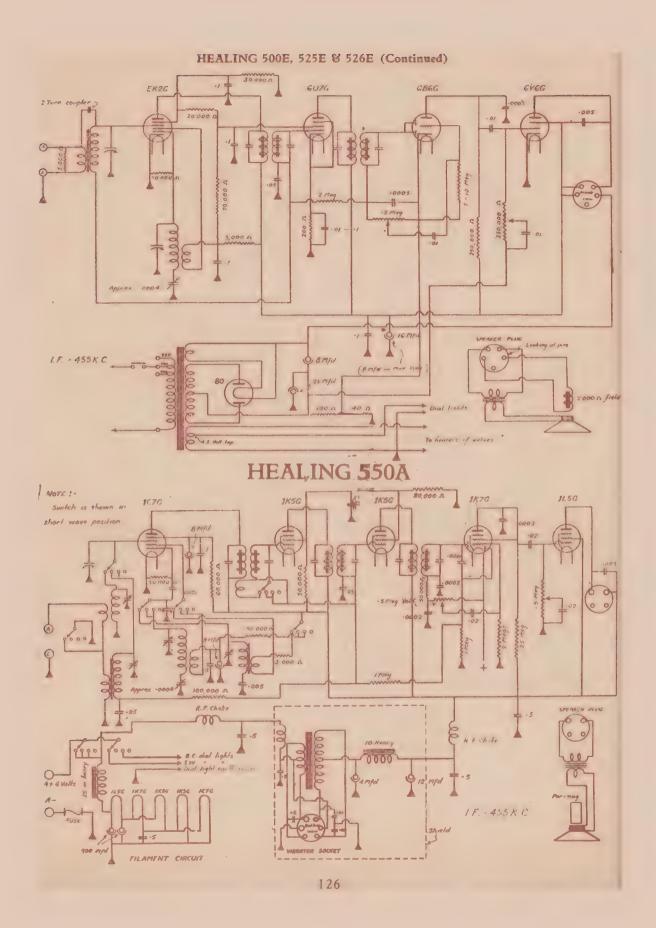
Power Supply - 200-250 volts A.C., 50 cycles. Intermediate Frequency - 456 kilocycles.

Frequency Range - 550-1,620 kilocycles Speaker Field - 2,000 ohms

Typical Valve Voltages (measured to chassis -

1,000 ohms per volt D.C. meter scales

		A.C.	50V	, 250V	250V	250V
VALVE	USE	FILAMENT	CATHODE	SCREEN	PLATE	OSC. PLATE
EK2G	Osc. Mod.	6.2	0	60	230	195
607G	I.F.	6.2	2	100	230	
6B6G	Det. A.V.C.					
	lat A.F.	6.2	-2.25	-	85	
6V6G	2nd A.F.	6.2	0	230	225	
80		4.9				



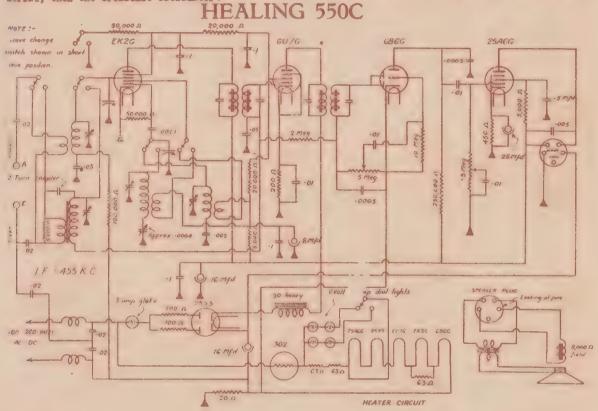
HEALING 550A (Continued)

1,000 ohms per volt D.C. meter scales

		lov	250V	250V 250V	
VALVE	USE	FILAMENT	SCREEN	FLATE OSC.PLATE	Power Supply - 6 volt Accumulator
107G	Oso. Mod.	2	50	155 (60 - B.C. 155 - 8.W	Preq. Range - 550-1,620 kilooycles,
1K5G	lst I.F.	2	45-50	165 '125 - 8.W	7,890-24,000 kilooycles.
1K5G	2nd I.F.	2	46-50	155	Intermediate Freq.: 455 kilocycles
1K7G	Det AVC let A	F 2	660	65	Battery Current - 1 amp. without dial
115G	2nd A.F.	2	155	150	lights.

Voltage measurements taken with aerial disconnected and no signal input. TRIMMERS: The trimmers are mounted in a row with the short-wave oscillator nearest the switch gear, followed by the short-wave

aerial, then the broadcast oscillator.



Power Supply - 200-260 - olts A.C.-D.C.

Intermediate Frequency - 455 kilocycles.

Typical Valve Voltages (250 volts A.C. input):-

Frequency Range - 550-1,620 kilocycles, 7,890-24,000 kilocycles

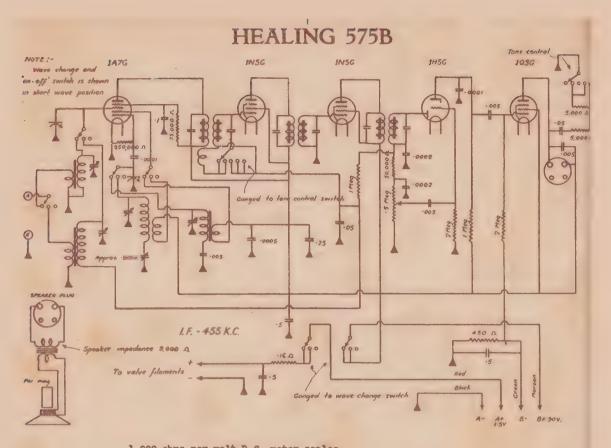
Speaker Field - 8,000 ohms

1,000 ohms per welt D.C. meter scales.

			50 V	250V	250V	250V
VALVE	USE	FILAMENT	CATHODE	SCREEN	PLATE	OSC. PLATE
EK2G	Ose. Mod.	6.8	40	58	190	155
6U7G	I.F.	6.5	•	90	190	
6B6G	Det. AVC let	6.3	-2		70	
25A6G	2nd A.F.	25	20	155	165	
25Y5	Rectifier	25	215			

Voltage across Speaker Field - 215 volts.

Voltage measurements taken with aerial disconnected and no signal input. Switch on broadcast position. TRIMMERS: The broadcast oscillator trimmer is nearest the end of the chassis. Then follow the short-wave oscillator trimmer and the short-wave aerial trimmer.



		1,000 onms	250V	250V	250V	
VALVE	USE	FILAMENT	SCREEN	PLATE	OSC.PLATE	Power Supply - 1.5 wolt A Battery, 90 wolt
1A7G	Osc. Mod.	1.4	35	85	85 /	B Battery.
INTG	lat I.P.	1.4	85	85		Freq. Range - 550-1,620 kilocycles, 7,890-
1N5G	2nd I.F.	1.4	85	85		24,000 kilocycles.
1H5G	Det.AVC lst	AF 1.4	-	20		Inter. Frequency - 455 kilocycles.
1Q5G	2nd A.F.	1.4	85	81		Battery Current3 amp. A Battery: '13
(The ab	pove measured	to chassis)			m.a. B Battery

Voltage across 450 chm bias resistor - 5 volts. Voltage measurements taken with aerial disconnected and no signal input. TRIMMERS: The trimmers are arranged in a row. The broadcast oscillator is near est the end of the chassis, then follow the short-wave oscillator, the broadcast aerial, and the short-wave aerial, in that order. Occasionally, the broadcast aerial trimmer is omitted.

HEALING 575E & 576E

Fower Supply - 200-250 volts A.C., 50 cycles. Intermediate Frequency - 455 kilocycles

Frequency Range - 550-1,620 kilocycles, 7,890 to 24,000 kilocycles.

Typical Valve Voltages (measured to chassis)-

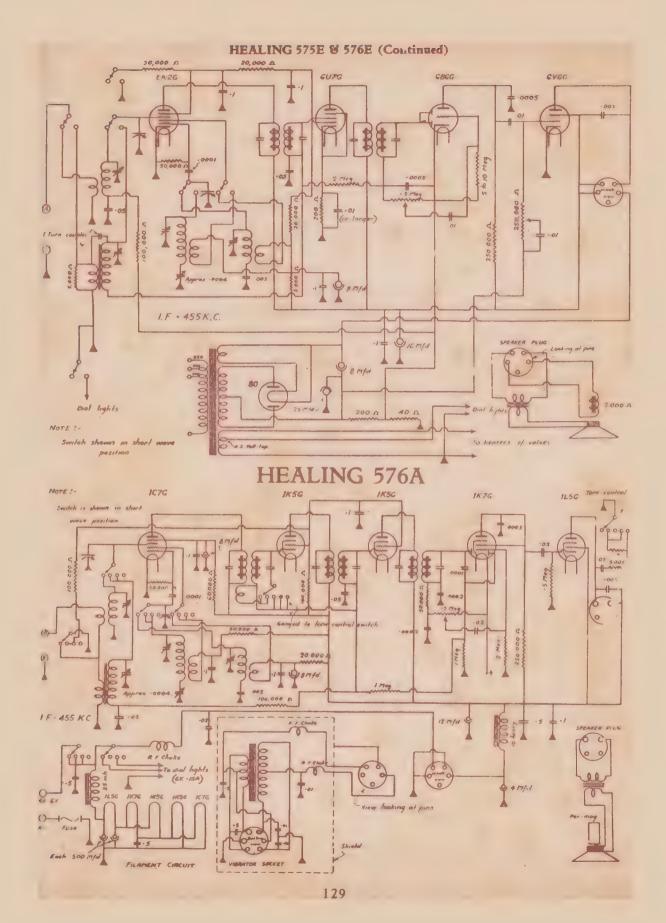
			1,000	ohms per volt	D.C. meter so	ales
		A.C.	50V	250V	250V	250V
VALVE	USE	FILAMENT	CATHODE	SCREEN	PLATE	OSC. PLATE
EK2G	Osa. Mod.	6.2	0	60-B.C. 85-S.W.	230	195
6 07 G	I.F.	6.2	2	100	230	
6B6G	Det.A.V.C., 1st A.F.	6.2	-2.25		85	• 1
676G	2nd A.F.	6.2	0	230	225	
80	Rectifier	4.9				

Voltage across back bias resistors - 15 volts.

Voltage across speaker field - 115 volts

Voltage measurements taken with aerial disconnected and no signal input.

TRIMMERS: The aerial trimmers are those nearest the end of the chassis. The short-wave trimmers may be identified by their connection to the enamelled wire leads on the short-wave coils.



HEALING 576A (Continued)

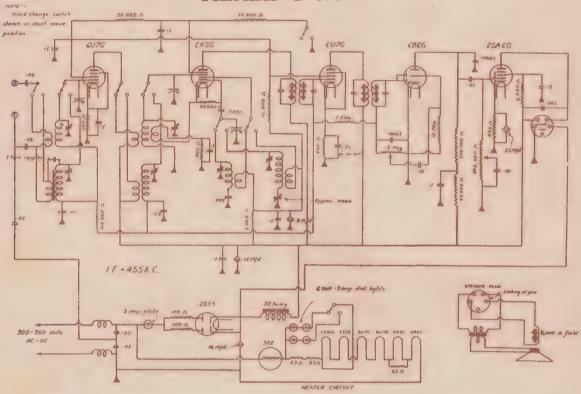
1.000 ohms per wolt D.C. meter scales

		107	250V	250V	250V	
VALVE	USE	FILAMENT	SCREEN	PLATE	OSC. PLATE	Power Supply - 6 Volt Accumulator
107G	Oso. Mod.	2	50	150	∫55- BC	Freq. Range - 550-1,620 kilosycles, 7,890-
					190- SW	24,000 bilocycles.
1K5G	lst I.F.	2	50	150		Intermediate Freq.: 455 kilocycles.
1K5G	2nd I.F.	2	50	150		Battery current - 1 amp. without dial
lk7G	Det.AVC 1st					lights.
	A.F.	2	con .	55		
1150	2nd A.F.	2	150	145		

Voltage measurements taken with aerial disconnected and no signal input.

TRIMMERS: From front to back, the trimmers are (1) broadcast oscillator: (2) short-wave oscillator: (3) short-wave aerial.

HEALING 675C



Power Supply - 200-260 volts A.C.-D.C. Intermediate Frequency - 455 kilocycles

Frequency Range - 550-1,620 kilocycles, 7,890-24,000 kilocycles. Speaker Field - 8,000 ohms

1.000 ohms per volt D.C. meter scales

Typical Valve Voltages (230 volts A.C. input):-

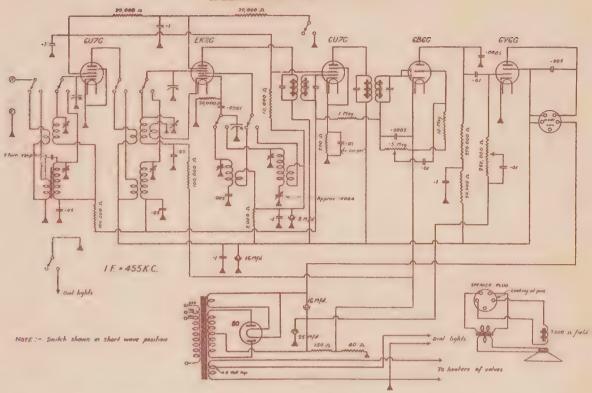
			SOV	250V	250V	250V
VALVE	USE	FILAMENT	CATHODE	SCREEN	PLATE	OSC. PLATE
6 1 7G	R.F.	6.3	2	105	180	
EE2G	Osc. Mod.	6.5	1.5	65	180	166
607G	I.F.	6.3	2.25	105	180	
6P6G	Det. AVC 1st A.F.	6.8	0 .	60	70	
25A6G	2nd A.F.	25	20	150	150	
25Y5	Rectifier	25	210			
CO. D.1	Annual State of the Control of the C	020 24-				

Voltage across Speaker Field - 210 volts.

Voltage measurements taken with aerial disconnected and no signal input. Switch on broadcast posit-

TRIMERS: The aerial section of the condenser gang is at the back, R.F. in the middle, and oscillator at the front. The short-wave aerial and R.F. trimmers are nearest the end of the chassis, whilst in the oscillator section the short-wave trimmer is the one nearer the back of the chassis.

HEALING 675E



Power Supply - 200-250 volts A.C. 50 cycles. Intermediate Frequency - 455 kilocycles. Speaker Field - 2,000 chms.

Frequency Range - 550-1,620 kilocycles. 7,890 to 24,000 kilocycles

Typical Valve Voltages (measured to chassis.)-

		A.C.	1,000	ohms per volt	D.C. meter sca	les
		1	50V	250V	250V	250V
VALVE	USB	FILAMENT	CATHODE	SCREEN	PLATE -	OSC. PLATE
6U7G	R.F.	6.2	0 .	. 110	240	
EK2G	Osc. Mod.	6.2	0	60 B C. 80 S.W.	240	190
607G	I.F.	6.2	2	110	240	
SB6G	Det. AVC 1st AF	6.2	-2.5	40	80	
6V6G	2nd A.F.	6.2	0	240	233	
80	Rectifier	4.9				

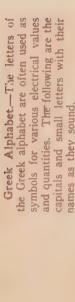
The voltage across the 40 ohm resistor to which the 6B6G connects is 2.5, with a further 10.5 volts across the 150 ohm resistor. Voltage across speaker field - 135 volts. Voltage measurements taken with aerial disconnected and no signal input.

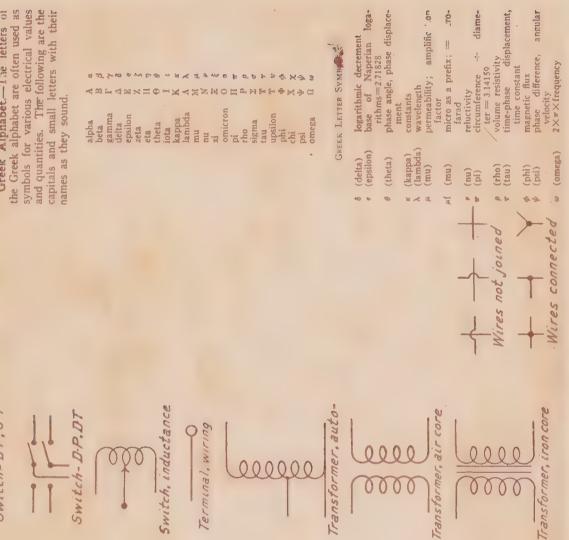
TRIMMERS - The aerial section of the condenser gang is at the back, R.F. in the middle and oscillator at the front. In the aerial and R.F. sections, the short-wave trimmers are those nearest the end of the chassis, and in the oscillator section the short-wave trimmer is near the switch gear.

SYMBOLS

Plate, tube

Positive





Resistance, fixed

Potentiometer

Resistance, variable

Rheostat

Switch- 5-P, 5-T

Speaker, loud

Switch- S.P. D.T

HIS MASTER'S VOICE RADIO

Manufactured by The Gramophone Co. Ltd., 2 Parramatta Road, Homebush, N.S.W.

HIS MASTER'S VOICE 145

1.4 Volt Battery Receiver

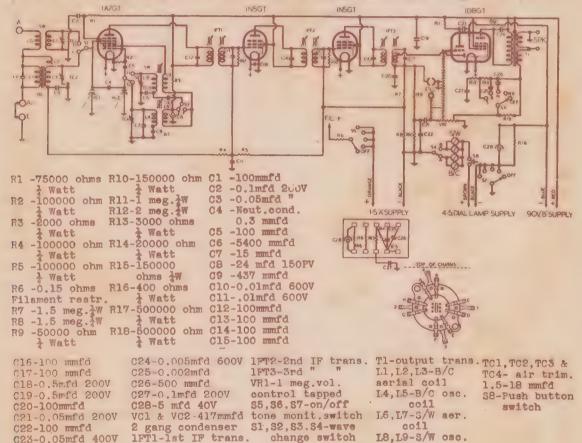
BATTERIES: 1-1.5 volt "A" battery, Type X250. 2-45 volt "B" batteries, Type "Superdyne". 1-4.5 volt "C" battery Type 126. NOTE. The 4.5 volt battery is used only for dial illumination, and in no way affects the operation of the receiver.

CONSUMPTION: "A" battery: 0.25 amps. "B" battery: 11.5 milliamps. SPEECH OUTPUT - Approx. 250mw. undistorted. WAVE-LENGTH RANGE: 187.5-545 metres (1600-550 kc.).

13.9-47 metres (21.57-6.38 mc.). VALVES: 1A7GT - Converter. 1N5GT 1st 1.F. Amplifier.

1N5GT - 2nd I.F. Amplifier. 1D8GT - Demod., A.F. Amp. & Power Output Valve.

LOUDSPEAKER: The loudspeaker is of the permanent magnetic type. It is an 8-inch model with a voice coil impedance at 400 cycles of 2.3 ohms. INTER. FREQ. - 457.5 Kc



VOLTAGE AND CURRENT TABLE

Values given are plus or minus 10%, receiver tuned to a point of no reception, supply voltages being: "A" = 1.5v. "B" = 90v. All "B" moltages measured on 250-volt range of a 1000 ohms per volt meter.

	na na	1A7GT 1N5GT		1N5GT	ld8gT		
					Triode	Pentode	
Plate to chassis volts	,	85	85	85	15	84	
Screen to chassis volts		35	85	85	40	8 5	
Osc. plate to chassis volts		82	-	-	-	un .	
Filament volts		1.4	1.4	1.4		1.1	
Plate current in ma		1.4	1.2	1.2	100	6.1	
Osc. plate current in ma.		1.1	-	-	en .	-	
Screen current in ma		0.6	0.15	0.15	-	1.5	
Filament current in ma.		50	50	. 50	-	100	

HIS MASTER'S VOICE 151 & 161

4 Valve Broadcast Battery Operated Receivers

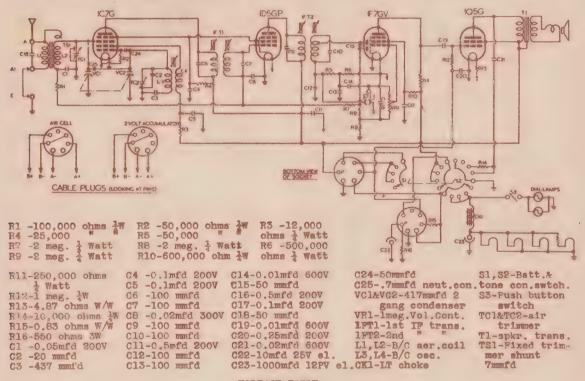
BATTERIES: Model 151 - "A" Supply: Air Cell or 2-volt 110 amp. hr. Accumulator. "B" supply: 2 a 45-volt Heavy duty batteries. Model 161 - "A" Supply: 2-volt 190 amp.hr. Accumulator. Vibrator. The accumulator, where supplied with the receiver, is already fully charged. The attery should be recharged at least every two months, or alternatively whenever the specific gravity as measured with a hydrometer falls below 1.140, or the voltage, with the residuer in operation, falls below 1.8 volts. CONSUMPTION: Model 151- "A" supply:0.34 amp. "F Supply - 12 ms. Model 161 - 1.7 amp.("A'INTER. FEEQ.: 457.5 kc. SPEECH OUTFUT - 270 millimats undistorted (plate circuit). WAVE-LENGTH RANGE: Models 151 & 161 - 187-545 metres (1600-550 kc.). VALVES: 1C7G Converter. 1D5G I.F. 1FTG Demod., A.V.C. and 1st A.F. 1Q55 Power. LOUDSPEAKER: 8" permanent magnet dynamic. Voice coil impedance -400 cycles of 2.3 chms. Tone Monitor (Combined with Battery Switch). The tone is controlled by a fourpoolision two-deck switch, the first position on which switches the receiver off: the second position switches the receiver on and gives normal reproduction, while the third and fourth positions introduce an increasing degree of high-frequency cut by means of a condenser resistor combination shunted across the speaker transformer primary.

CAUTION: It is not advisable to alter the length of any of the battery connection cables, because their resistance forms part of the total series resistance introduced to obtain correct

cause their resistance forms part of the total series resistance introduced to obtain correct filament voltages.

The property of the second of the form of the first or the vibrator pos-

IMPORTANT NOTE: It is essential that the resistance of the 5-amp. fuse in the vibrator positive L.T. circuit should not exceed 0.01 of an ohm, otherwise the performance will suffer. Use only Australux 5-amp. fuse, type 1AG.



VOLTAGE TABLE.

The receiver should be tuned to a point of no reception on the BC band. Values given are plus or minus 10% with the exception of filament voltages, which are plus or minus 5%. All voltage readings above 10 volts are taken on the 250-volt scale of a 1000 chms per volt voltmeter. If a voltmeter with an internal resistance of less than 1000 chms per volt is utilised, allowance, must be made for the voltage drop caused by the voltmeter. Note, that with vibrator H.T. supply, it will not be possible to measure the 1256 grid bias at the chassis due to the presence of a 0.25 megohm decoupling resistor in the vibrator unit; however, this voltage may be measured at the vibrator unit.

MODEL 151 (Battery H.T.)

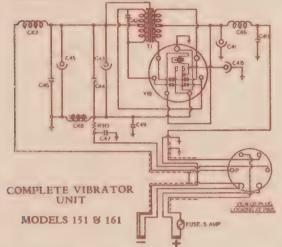
Plate to chassis volts	1.C76 84	1D5G 84	1F7G 15	1 Q50 82
Plate current (ma)	1.2	1.4	0.3	4.5
Osc. plate to chassis volts	60	-	-	400
Osc. plate current (ma)	1.7	-	60	-
Screen to chassis volts	37	37	19	84

HIS MASTER'S VOICE 151 (Continued) Screen current (me) 1.0

0.6 0.1 0.7 Bias voltages 0 -6.3 Filament voltages With air cell = 2.33 volts 1.85 1.85 1.85 1.57 or accumulator = 2.0 volts

MODEL 161 (Vibrator H.T.)

1070 105G 1776 1056 Plate to chassis volts 86 86 15 84 1.5 1.6 0.3 5.9 Plate current (ma) Osc. plate to chassis volta 61 Osc. plate current (ma) 1.7 Screen to chassis volts 40 40 19 86 Screen current (ma) 0.7 0.1 0.9 1.0 Bias voltages Filament voltages -0 0 0 -5.8 1.85 1.85 1.85 Accumulator = 2.0 volts 1.57



Tl - Vibrator Transformer

CK6 - RF Choke L.T. CK7 - RF Choke H.T

CK7 - RF Choke H.T.

CK8 - H.T. Choke

VIB - "Oak" 2V. split reed vibrator.

C40 - 0.lmfd 200V condenser

C41 - 400 mfd 12 P.V. electro

C42 - 0.01 mfd 1000V condenser

C43 - 8 mfd 525 P.V. electrolytic

C44 - 0.1 mfd 400V condenser

C45 - 24 mfd 150P.V. electrolytic

C45 - 0.5 mfd 200V condenser

1D50

1F7G

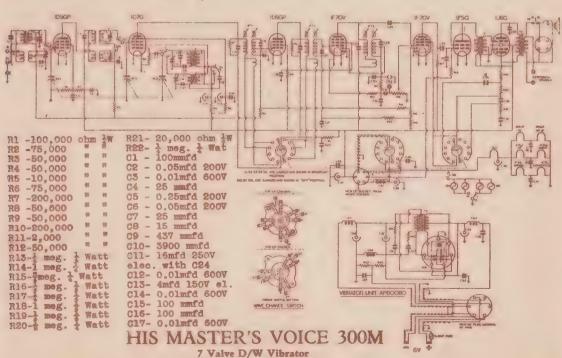
1056

C46 - 0.5 mfd 200V condenser

C47 - 0.1mfd 200V condenser

R30 - 250,000 ohms 1 Watt C48 - 50mfd 25V electrolytic

C49 - 100 mmfd condenser



Powered Battery Receiver

HIS MASTER'S VOICE 300M, (Continued)

	C18 -0.1mfd 200V	C32- 100 mmfd	T2 -output trans.	L7&L8-S/W aerial
	C19 -100 mmfd	C33- 0,02mfd 600V	S1-S5- wave	coil .
	C20 -100 mmfd	C34- 500 mmfd	change switch	L9&L10-S/W detc.
	C21 -0.01mfd 600V	C35- 500 mmfd	S8 -Receiver	coil
	C22 -0.05mfd 200V	C36- 0.01mfd 600V	spkr. switch	Lll&Ll2- S/W oscilla-
	C23 -0.1mfd 200V	C37- 0.5mfd 200V	S9 -push button	tor coil
	324 -8mfd 250V	C38- 500mfd 12PV	switch	TC1-TC6- air trimmer
	elec.with Cll	C39- 0.1mfd 200V	S10-S12-battery	1.5-18mmfd
	025 -500mfd 12PV	C40- 0.1mfd 200V	& tone monitor	TS1- fixed trimmer
	electro	C41- 0.1mfd 200V	switch	shunt 7 mmfd
,	C26 -0.5mfd 200V	C42- 0.01mfd 600V	Ll&L2-B/C aer.	CK1 - Choke
	C27 -100 mmfd	VC1.VC2&VC3- 3	còil	1FT1- 1st IF trans.
	728 -100 mmfd	gang cond. 12-	L3&L4-B/C det.	1Ft2- 2nd IF trans.
	C29 -50 mmfd	417mmfd	coil	1FT3- 3rd IF trans.
	C30 -100 mmfd	VR1- 1 meg. pot.	L5&L6-B/C osc.	
		Tl -driver trans.	coil	

BATTERY: The battery required for the operation of this receiver is as follows: 1-6 volt 150-amp. hour accumulator. The battery supplied with the receiver is already fully charged. This battery should be recharged at least once monthly, or alternatively whenever the specific gravity, as measured with a hydrometer, falls below 1.140, or the voltage with the receiver in operation falls below 5.4 volts. CONSUMPTION: approx. 1.3 amps. in normal operation. SPEECH OUTPUT: Approx. 2 watts (peak) undistorted. WAVE-LENGTH RANGE: 187-545 metres (1600-550kc.). 13.9-47 metres (21.59-6.38 mc.). INTERMEDIATE FREQ.: 457.5 Kc.
VALVES: 1D5GP R.F. 1C7G Converter. 1D5GP 1st I.F. 1F7GV 2nd I.F. and Demod. 1F7GV 1st AF and AVC. 1F5G Driver. 1J6G Power. LOUDSPEAKER: Permanent magnetic dynamic type. 12" with a voice coil impedance at 400 cycles of 3 ohms.

TONE MONITOR: This is a six-position, three-deck switch, used as a combined tone control and battery switch. 1st Position: Receiver switched off. 2nd Position (Wide Range): Receiver on, extra coupling switched into the first and second I.F. transformers, thus providing maximum top note reproduction. 3rd Position: (Normal) Receiver on, extra coupling switched out on T.F. transformers, giving maximum selectivity. 4th Position: (Bass) Receiver on, high audio frequency cut introduced, otherwise same as switch pos. 3. 5th Position (Speech): Receiver on, low audio frequency cut introduced, otherwise same as switch pos. 3. 6th Position (Overseas): Receiver on, high and low audio frequency cut introduced, otherwise same as switch position 2.

VOLTAGE TABLE

Values given are plus or minus 10% with receiver tuned to a point of no reception and a low tension battery voltage of 6 volts. Bias voltages are measured between the negative side of filament and chassis. Note that the 1F5G valve (V6) bias is secured from two sources, one, due to a valve filament drop of 2 volts and the other to a fraction of the voltage drop developed across the filter choke in the negative high tension circuit.

If a voltmeter with an internal resistance of less than 1000 ohms per volt is utilised, allowance must be made for the voltage drop caused by the volt-

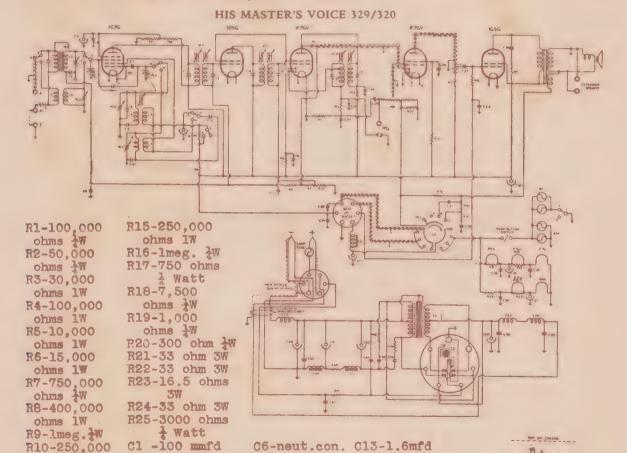
meter.

	V1 1D5GP	V2 1076	V3 1D5GP	V4 1F7GV	V5 1F7GV	V6 1F5G	V7 1J6G
Plate to chassis volts	140	140	132	140	30	135	140
Plate current (ma.) Osc. plate to chassis volts	1.9	1.8	-	1.9	0.4	7.6	(ea finte)
Osc. plate current (ma.) Screen to chassis volts	52	2.1	50	50	32	-	-
Screen current (ma.)	0.6	1.2		0.6	0.1	_	-
Bias voltages	-2	0 .	0	0	-5	-5.1	-4
Filament voltages	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Voltage drop across H.T. filter choke: 11 volts

HIS MASTER'S VOICE 329/320 Dual Wave & 359 Broadcast

BATTERY: 1-6 volt 130-amp, hour accumulator. The battery supplied with the receiver is already fully charged. This battery should be re-charged at least once monthly, or alternatively whenever the specific gravity as measured with a hydrometer falls below 1.140 or the voltage with the receiver in operation falls below 5.4 volts. CONSUMPTION: Approx. 1.0 amp. in normal operation. SPEECH OUTPUT: Approx. 0.75 watts undistorted. WAVE-LENGTH RANGE: 187.5-545 metres (1600-550kc.). 13.9-47 metres Models 329 and 320 only. (21.57-6.38mc.). VALVES: 1076 Converter. 1D56 1st I.F. 1F76 2nd I.F. and Demodulator. 1F7G 1st AF and AVC. 1G5G Power. LOUDSPEAKER. Permanent magnetic type. 10" with a voice coil impedance at 400 cycles of 3.3 ohms. TONE MONITOR: 4-position, single-deck switch, used as a combined tone control and battery switch. 1st Position - Receiver switched off. 2nd Position (Normal) - Receiver on, maximum trble and bass note reproduction. 3rd Position (Bass) - Receiver on, high audio-frequency cut intro duced. 4th Position (Speech) - Receiver on. low audie-frequency cut in-INTERMEDIATE FREQUENCY - 460 Kc. troduced.



1mmf

C7-50 mmfd

C8-15 mmfd

C9-437mmfd

C12-50mmfd

Cll-100mmfd

C2 -0.05mfd

200V

C4 -0.lmfd

200V

300V

C5 -0.02mfd

C3 -4mfd 100V

WKG elec. con.

ohms W

ohms W

R12-50,000

ohms AW

R13-5,000

ohms W

R14-lmeg.lW

R11-250,000

250V WKG elec.

with C30

C10-5400mmfd C15-100mmfd

C14-0:01mfd

Cl6-50mmfd

C17-0.02mfd

300V

600V

HIS MASTER'S VOICE 329/320 (Continued)

18mmfd

C18-0.1mfd 200V C19-50 mmfd C20-100mmfd C21-100 mmfd C22-100 mmfd C23-250 mmfd C24-0.1mfd 200V C25-0.01mfd 600V C26-0.lmfd 200V C27-0.01mfd 600V C28-1.0mfd 200V C29-0.01mfd 600V C30-8mfd 250V elec.WKG with C13 C31-0.02mfd 300V C32-1.0mfd 200V C33-0.1mfd 200V C34-500mfd 12PV elec. with C40 C35-0.1mfd 200V C36-0.1mfd 200V C37-10mfd 25V WKG elec. cond. C38-0.5mfd 200V C39-0.5mfd 200V

C40-500mfd 12PV elec.with C34 VC1&VC2-417mmfd 2 gang cond. VR1-1 meg. pot. tapped S2-Tone monit.& battery switch dial lamps 6.3V 0.15 to 0.3 amp. 1FT1-1st IF transform. 1FT2-2nd IF transform. 1FT3-3rd IF transform. T1-Output transformer CKL-LT Choke Ll&L2-B/C aerial coil L3&L4-B/C osc. coil

L5&L6-S/W aer.

coil

VIBRATOR UNIT. T2-V1b. trans. VIB-"Oak" split reed synchronous vibrator CK2-RF choke HT CK3-HT choke CK4-HT choke CK5-RF choke LT CK6-RF choke LT C60-4mfd 350V elec. with C61 & C62. C61-4mfd 350V elec.with C60 & C62 C62-4mfd 525V elec.with C60 & G61

L7&L8-S/W osc.

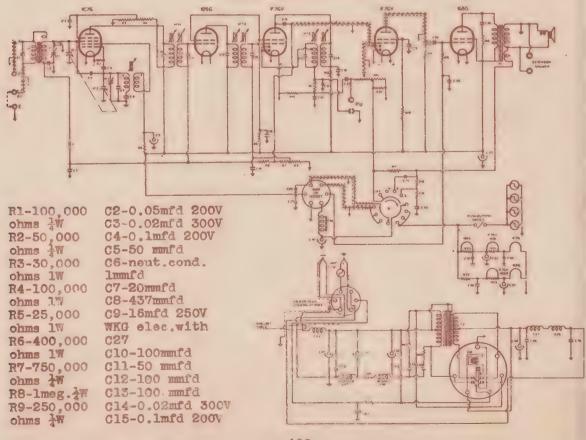
coil

air trimmer 1.5-

TC1.TC2.TC3 & TC4-

C63-0.5mfd 400V condenser C64-0.lmfd 400V condenser C65-0.02mfd 1500V condenser C66-0.02mfd 1500V condenser C67-0.lmfd 200V condenser C68-500mfd 6V WKG electro. cond. C69-0.5mfd 200V condenser C70-0.1mfd 200V condenser R40-200 ohms 3 Watt Resistor R41-250,000 ohms Watt resis. R42-1000 ohms Watt resis. R43-1000 ohms 4 Watt resis.

HIS MASTER'S VOICE 359



HIS MASTER'S VOICE 359 (Continued)

R10-250,000 ohm \[\frac{1}{4} \text{ Watt} \] R11-50,000 ohm \[\frac{1}{4} \text{ Watt} \] R12-5000 ohm \[\frac{1}{4} \text{ Watt} \] R13-1 meg. lW R14-250,000 ohm \[\frac{1}{4} \text{ Watt} \] R15-1 meg. \[\frac{1}{4} \text{ Watt} \] R16-750 ohm \[\frac{1}{4} \text{ Watt} \] R17-7500 ohm \[\frac{1}{4} \text{ Watt} \] R18-1000 ohm \[\frac{1}{4} \text{ Watt} \] R20-33 ohm \[3 \text{ Watt} \] R21-33 ohm \[3 \text{ Watt} \] R22-16.5 ohm \[3 \text{ Watt} \] R24-3000 ohm \[\frac{1}{4} \text{ Watt} \] VIBRATOR UNIT.	C16-50 mmfd C17-100 mmfd C18-100 mmfd C19-0.lmfd 200V C20-100 mmfd C21-250 mmfd C22-0.0lmfd 600V C23-0.lmfd 200V C24-0.0lmfd 600V C25-lmfd 200V C26-0.0lmfd 600V C27-8mfd 250V WKG elec.with C9 C28-0.5mfd 200V C29-0.5mfd 200V C30-500mfd 12PV elec.with C34 C31-0.02mfd 300V C32-lmfd 200V	C33-0.lmfd 200V C34-500mfd 12PV elec with C30 C35-0.lmfd 200V C36-0.lmfd 200V C37-l0mfd 25V WKG elec.Cond. VCl&VC2-417mmfd 2 gang conden. VR1-lmeg. pot. tapped S1-Tone monit. & battery swtch. dial lamps 6.3V O.16 to 0.3 amp lFT1-lst IF transform. lFT2-2nd IF transform.	1FT3- 3rd I.F. transformer T1 - output trans- former CK1- LT choke Ll&L2-B/C aerial coil L3&L4-B/C osc. coil TS1-fixed trimmer shunt 7.0 mmfd TCl&TC2-air trimmer mer 1.5-18mmfd
T2-Vib.Trans. VIB-"Oak" split reed synchron. vibrator CK2-RF Choke HT CK3-HT Choke CK4-HT Choke CK5-RF Choke LT CK6-RF Choke LT	C60-4mfd 350V elec.with C61 & C62 C61-4mfd 350V elec with C60 & C62 C62-4mfd 525V elec.with C60 & C61	C63-0.5mfd 400V C64-0.1mfd 400V C65-0.02mfd 1500V C66-0.02mfd 1500V C67-0.1mfd 200V C68-500mfd 6V WKG elec.cond. C69-0.5mfd 200V C70-0.1mfd 200V	R40-200 ohms 3W R41-250,000 ohms

VOLTAGE TABLE.

Values given are plus or minus 10% with receiver tuned to a point of no reception and a low tension battery voltage of 6 volts. Bias voltages are measured between the negative side of filament and chassis.

Note that the 1656 valve (V5) bias of 14 volts is obtained from the voltage drop across the two smoothing chokes and 200 ohm resistor connected in series in the negative side of the high-tension circuit.

Since this bias voltage is decoupled by means of a $\frac{1}{4}$ megohm resistor in the vibrator chassis it is not possible to measure it at the receiver, but only at the vibrator unit.

If a voltmeter with an internal resistance of less than 1000 ohms per volt is utilised, allowance must be made for the voltage drop caused by the voltmeter.

	Vl	V2	V3	V4	V 5	
	107G	1D5G	1F7GV	1F7GV	1656	
Plate to Chassis Volts	140	140	138	42	136	
Screen to chassis volts	28	42	42	30	140	
Oscillator plate to chassis volts	(BC 95 SW 110	-			Page.	
Bias voltage	9	4	2	2	14	
Filament voltages	2	2	2	2	2	

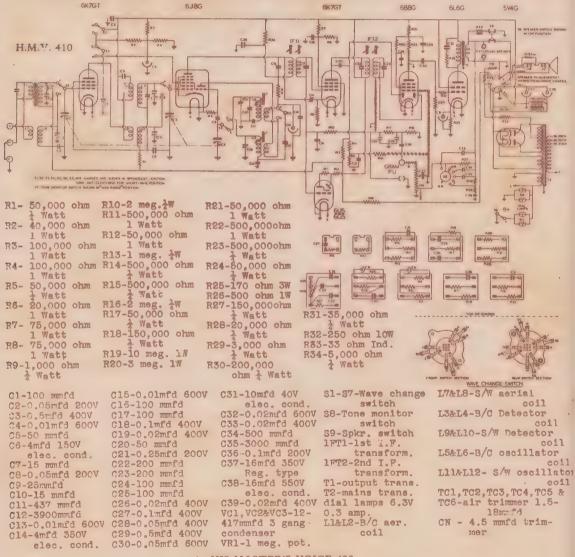
139

HIS MASTER'S VOICE 410 6 Valve D/W A.C. Receiver AND 420 D/W A.C. Radiogram

CONSUMPTION: Model 410 96 watts. Model 420 (Radio) -96 watts (Gram.) 170 watts.

WAVE_LENGTH RANGE: 13.9 metres (21.59 megacycles) to 47 metres (6.58 megacycles). 187 metres (1600 kc.) to 545 metres (550 kc.). MAX. UNDISTORTED POWER OUTPUT: 6 watts. INTERMEDIATE FREQ.: 457.5Kc. LOUDSPEAKER: 12", the field winding acting as filter choke. D.C. resistance of field coil, cold - 1200 chms. D.C. resistance of voice coil - 2 chms. 400 cycle impedance of voice coil - 2.35 chms. VALVES: 6K7GT (2), 6J8G,6B8G,6L6G,5V4G,6U5/6G5.

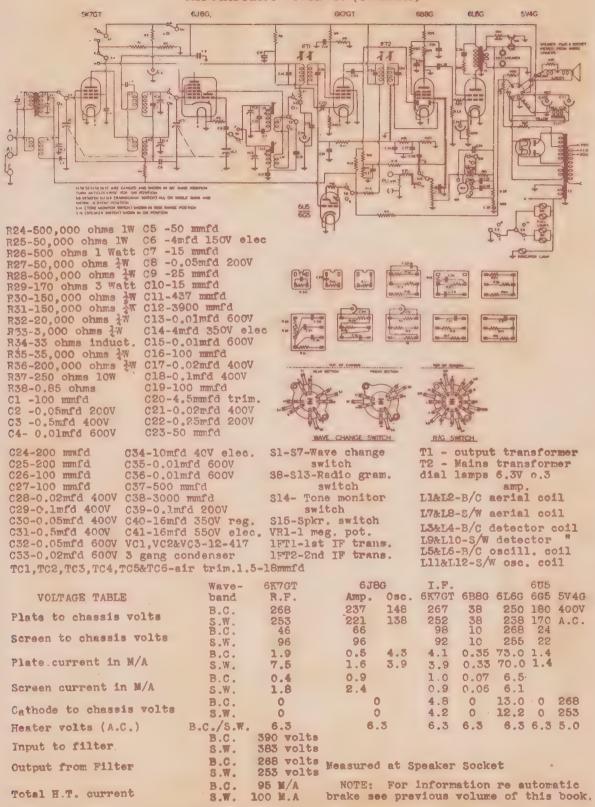
TONE MONITOR: 5 position, 2 deck switch. In Model 410 the following effects are secured in the various switch positions: lst Position (Wide Range): Normal bass and boosted treble, the latter compensating for side band cut. For local reception of high fidelity. 2nd Position (Normal): Normal bass and slight treble cut. For normal and distant reception. 3rd Position (Bass): Bass boost and increased treble cut. For deeper tone and reduction of static and surface noise. 4th Position (Speech): Bass cut and treble boost. For long-distance reception of speech with good intelligibility, or reduced bass response. 5th Position (Overseas): Bass and treble cut. For easy short-wave tuning with reduced background noise and freedom from microphony. In Model 420 additional boost is provided, which is cut in by the Radio-Gram. switch in the "Gram." position and removed in the "Radio" position.



HIS MASTER'S VOICE 420

R1-40,000 ohms R4-50,000 ohm ¼W R9-75,000 ohm 1W R14-500,000 ohm ¼W R19-50,000 ohm ¼W R2-100,000 ohm AW R6-50,000 ohm ¼W R19-50,000 ohm ¼W

HIS MASTER'S VOICE 420 (Continued)



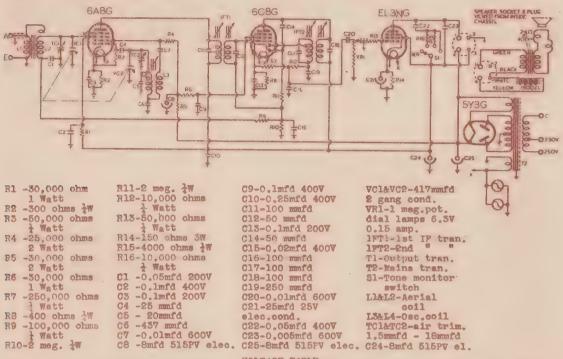
HIS MASTER'S VOICE 440, 441, 444 & 451

4 Valve Broadcast Band A.C. Mantel Receivers

CONSUMPTION: 56 watts. WAVE-LENGTH RANGE: 187.5 to 550 metres, or 1600 to 545 kilocycles.

MAX. UNDISTORTED POWER OUTPUT: 3.0 watts. INTERMEDIATE FREQUENCY: 457.5kc.

LOUDSPEAKER: 6" cone speaker. DC resistance of field, cold - 1500 ohms. DC resistance of voice coil - 2.2 ohms. 400 cycle impedance of voice coil - 2.4 ohms. VALVES: 6A8G, 6G8G, EL3(N)G, 5Y3G.



VOLTAGE TABLE

Values given may vary plus or minus 10% and are taken or 240 volt mains (250-volt primary tap). Receiver tuned to no signal point unless otherwise stated.

	AT	Vac.	46	40	A 2	
	Amplr.Sect.	Sect.	(6086)	(EL3(N)G)	573G	
Plate to chassis volts	248	116	248	236	100	
Screen to chassis volts	95 🕈	-	190 *	262	44	
	92 .	-	131	248	40	
Heaters	-	6.1	6.1	6.1	4.8	
Cathode to chassis volts	-3.0	-	-4.1	-5.4		
# Tuned to strong local	. station					
Total HT current measured at termin			52 mm			
Vl oscillator anode current measure	d at Junction R4	& R5	2.7 m	St.		

V1 screen current measured at V1 socket V2 screen current measured at V2 socket V3 screen current measured at screen terminal of V3 socket V3 plate current measured at terminal 1 of speaker socket 5.6 ms

HIS MASTER'S VOICE 470 8 Valve Dual Wave A.C. AND

509 & 519 Dual Wave A.C. Radiograms

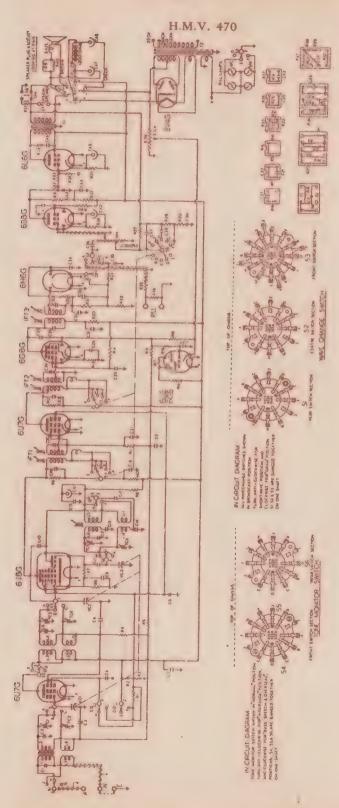
CONSUMPTION: Model 470 - 105 watts. Model 509 (Radio) 105 watts (Gram.) 165 watts.

Model 519 (Padio) 105 watts (Gram.) 180 watts. WAVE-LENGTH RANGE: 13.9 metres (21.58 megacycles) to 47 metres (6.38 megacycles). 187.4 metres (1,600 kc.) to 545 metres (550 kc.).

MAX. UNDISTORTED POWER OUTPUT: 7 watts. INTERMEDIATE FREQUENCY: 457.5 kc.

LOUDSPEAKER: Models 470 and 509 use a 12" speaker, and Model 519 uses a 12" speaker of high fidelity type and very massive construction, the field winding in each case acting as filter choke. DC resistance of field coil, cold - 1,200 chms. DC resistance of voice coil: Models 470 and 509 - 2 chms. Model 519 - 6.3 ohms. 400 cycle impedance of voice coil: Models 470 and 509 - 2.35 ohms. Model 519 - 8 ohms. VALVES: 607G (2), 638G, 688G, 688G, 686G, 686, 594G, 665 (Tuning Indicator).

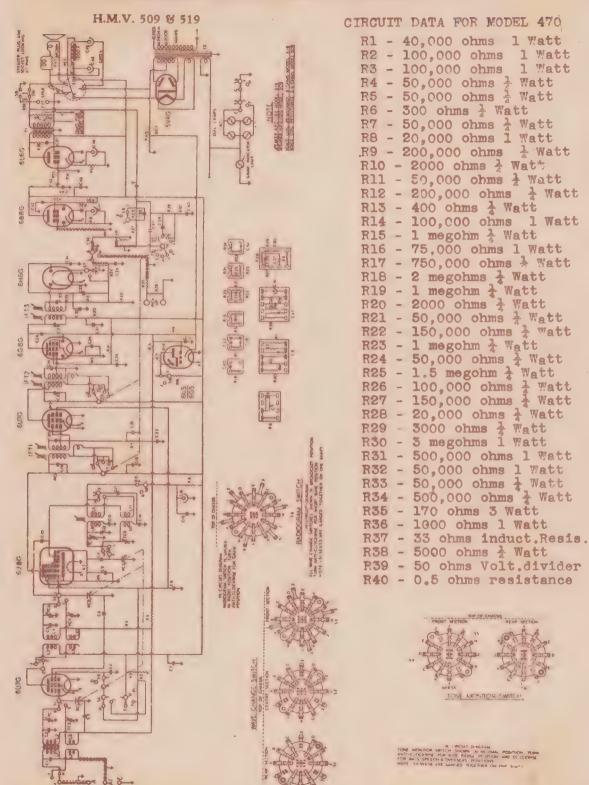
TONE WONTTOR: This is a 5-position two-deck switch. The following effects are secured in the various switch positions: 1st Position (Wide Range): Bass and treble boost, and broad tuning, for highest fidelity. 2nd Position (Normal): Sass and treble boost, and sharp ing. For normal and distant reception. 3rd Position (Bass): Bass boost and treble cut with sharp tuning. For deeper tone and reduction of static. 4th Position (Speech): flat



bass response and treble boost, with sharp For long-distance reception of speech, or reduced response. 5th Position: (Overseas): Flat bass sponse, and treble cut, gether with broad tuning, For easy short-wave tuning with reduced background noise and freedom from microphony. The maximum bass and treble boost, obtained at low ume Control settings. approx. 6db, but, as TITEviously explained, this dependent on the Volume Control position being progressively reduced towards full volume position. In Models 509 and 519 a bass boost circuit is switched into operation in the "Gram" position and is short-circuited in the "Radio" position. STATIC LIMITER: This device is controlled by a switch located on the back of the chassis in the case of Model 470 and on the control el in Models 509 and 519. It is intended to limit peak level of static or ectrical disturbances of peaky waveform to a not greatly exceeding level of the carrier of the station being received, thus preventing the drowning the signal by very loud burst It is of static. useful chiefly in long-distance reception of speech, and short-wave reception where electrical interference severe. It usually has effect slightly detrimental on the tone of musical 10ception, and should therefore be switched off not required. It has effect on the sensitivity or selectivity of the receiver.

NOTE: For information re Automatic Brake see previous volume of this book.

HIS MASTER'S VOICE 470, 509 & 519 (Continued)



HIS MASTER'S VOICE 470 (Continued)

C1 -100 mmfd C2 -7 nmfd C3 -0.05mfd 200V C4 -0.1mfd 400V C5 -15 mmfd C6 -0.05mfd 200V C7 -0.5mfd 400V C8 -0.1mfd 400V C9 -0.1mfd 200V C10-1.3mmfd neut condenser C11-50 mmfd C12-15 mmfd C12-15 mmfd C13-460 mmfd C14-5400 mmfd C15-0.01mfd 600V C16-16mfd 500V WKG C17-0.01mfd 600V C18-0.05mfd 400V C19-100 mmfd C20-100 mmfd C20-100 mmfd C21-0.01mfd 600V	C36-0.02mfd 400V C37-0.02mfd 400V C38-0.0015 mfd C39-0.1mfd 200V C40-10mfd 25V elec. cond. C41-0.02mfd 400V C42-0.02mfd 600V	spkr.switch Ll&L2-B/C aer- ial coil	L7&L8-S/W aerial coil L3&L4-B/C detector coil L9&L10-S/W detector coil L5&L6-B/C oscillator coil L11&L12-S/W oscill. coil T1 - Output transformer T2 - Mains transformer 1Ft1-1st I.F. transformer 1FT2-2nd I.F. transformer 1FT3-3rd I.F. transformer TC1,TC2,TC3,TC4,TC5 TC6- air trimmer 1.5-18 mmfd
CSI-O.OIMLG 800A	C43-100 mmrd		1.5-18 mm.g

CIRCUIT DATA FOR MODELS 509 & 519

	CIRCUIT DATA FO	OK MODELS 303 @ 313	
R1 - 40,000 ohm 1W	R37-170 ohm 3W	C26-0.05mfd 200V	Ll&L2-B/C aerial
R2 -100,000 ohm 1W	R38-1000 ohm 1W	C27-0.04mfd 400V	coil
R3 -100,000 ohm 1W	R39-33 ohm ind.	C28-50 mmfd	L7&L8-S/W aerial
R4 -50,000 ohm 1W	R40-50 ohm Volt	C29-100 mmfd	coil .
R5 -50,000 ohm \w	divider	C30-1CO mmfd	L3&L4-B/C detector
R6 -300 ohm + Watt	R41-270 ohm 3W	C31-0.05mfd 400V	coil
R7 -50,000 ohm \www.	R42-230 ohm 3W	C32-50 mmfd	L9&L10-S/W detec.
R8 -20,000 ohm 1W	R43-0.6ohm(519)	C33-500 mmfd	coil
R9 -2000 ohm 1W	0.5ohm(509)	C34-0.5mfd 200V	L5&L6-B/C osc.
R10-200,000 ohm 1W	C1 -100 mmfd	C35-250 mmfd	coil
R11-50,000 ohm $\frac{1}{4}$ W	C2 -7 mmfd	C36-0.02mfd 400V	Lll&Ll2-S/W osc.
R12-200,000 ohm 1W	C3 -0.05mfd 200V	C37-0.01mfd 600V	coil
R13-400 ohms 1W	C4 -0.1mfd 400V	C38-1000 mmfd	1FT1-1st I.F.
R14-100,000 ohm 1W	C5 -15 mmfd	C39-0.01mfd 600V	transformer
R15-1 meg. 1 Watt	C6 -0.05mfd 200V	C40-0.1mfd 200V	1FT2-2nd I.F.
R16-75,000 ohm. 1W	C7 -0.5mfd 400V	C41-10mfd 25V	transformer
R17-750,000 ohm 3W	C8 -0.1mfd 400V	elec.	1FT3-3rd I.F.
R18-2 meg. 1 Watt	C9 -0.1mfd 200V	C42-0.02mfd 400V	transformer
R19-1 meg. 1 Watt	ClO-1.3mmfd	C43-0.02mfd 600V	Tl - Output trans-
R20-2000 ohm + W	neut. cond	C44-100 mmfd	former
R21-50,000 ohm \W	Cll-50 mmfd	C45-0.5mfd 400V	T2 - Mains trans-
R22-150,000 ohm 1W	C12-15 mmfd	C46-50mfd 25V	former
R23-1 meg. + Watt	C13-460 mmfd	elec.	S7 - Static Lim-
R24-50,000 ohm 1W	C14-5400 mmfd	C47-0.02mfd 400V	iter switch
R25-1.5 meg. 1W	C15-0.01mfd 600V	C48-16mfd 350V	S8 -Radiogram
R26-100,000 ohm 1W	C16-16 mfd 500V	reg. condenser	switch
R27-150,000 ohm W	WKG	C49-16mfd 500V	S9 -Receiver
R28-150,000 ohm W	C17-0.01mfd 600V	electro.	speaker
R29-20,000 ohm \(\frac{1}{4}\text{W}\)	C18-0.05mfd 400V	VC1, VC2&VC3-12	dial lamps 6V
R30-3,000 ohm 1W	019-100 mmfd	417mmfd 3 gang	25 amp.
R31-5,000 ohm 4W	C20-100 mmfd	condenser	TCl,TC2,TC3,TC4.
R32-3 meg. 1 Watt	C21-0.01mfd 600V	S1, S2, S3-wave	TC5&TC6- air trim.
R33-500,000 ohm 1W	C22-0.02mfd 400V	change switch	1.5-18 mmfd
R34-50,000 ohm 1W	c23-100 mmfd	S4, S5&S6-tone	VR1 - 1 meg. pot-
R35-50,000 ohm 1w	C24-100 mmfd	monitor switch	entiometer tap-
R36-500,000 ohm 1W	C25-0.1mfd 400V		ped.

HIS MASTER'S VOICE 470, 509 & 519 (Continued)

VOLTAGE TABLE

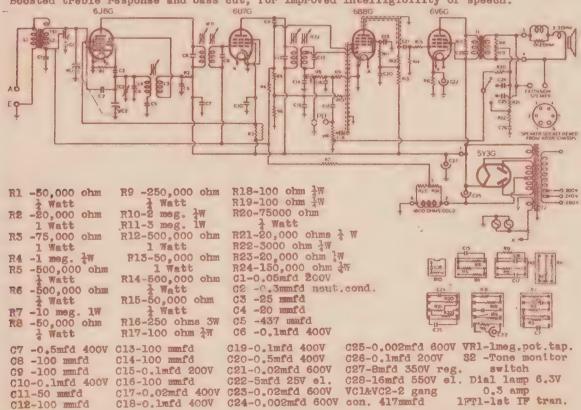
Values given are plus or minus 10% with receiver tuned to point of no reception, broadcast band, with line voltage of 240 volts (mains transformer primary tap set for 240 volts). If a voltmeter having a resistance of less than 1000 chms per volt is used.allowance must be made for the voltage drop caused by the voltmeter.

	6	U7.G		6J	90		607	(G					
			Am	р.	Osc.								
	BC	SW	BC	SW	BC S	SW	BC	SW	6G8G	6H6	6B8G	6L6G	5V4G
Plats to chassis volts	268	252	268	252	162	150	268	252	258	_	35	250	_
Screen to chassis volts	50	100	67	100			67	100	108	-	20	268	-
Cathode to chassis volts		-	1.7	2.0	-				- 10	-	1.5	13.0) -
Reaters volts	~ 6.0)	. 6	.0	49		6.	.0	6.0	6.0	6.0	6.0	4.9
Plate current MA	7 1.8	7.0	0.1	0.5	5.5 8	5.3	2.6	6.5	5.5	-	0.3	72	-
Screen current MA	0.3	1.7	0.3	0.9	-		0.6	1.8	1.5	-	0.1	4.8	_
Total cathode current MA	1.8	8.7	6.1	6.9	600		3.2	8.3	7.0	-	0.4	77	es .

Input to filter (volts to chassis): 432
Output from filter (volts to chassis): 268
Volts drop across 50 ohm bias resistor: BC 4.8, SW 5.1.
HT current (measured at centre tap): BC 98 ma., SW 105 ma.

HIS MASTER'S VOICE 550

5 Valve A.C. Broadcast Receiver
CONSUMPTION: 82 watts. WAVE LENGTH RANGE; 187.5 metres (1600 kc.) to 545 metres (550 kc.). INTERMEDIATE PREQUENCY: 457.5 kc. MAX. UNDISTORTED POWER OUTPUT: 4.5 watts. LOUDSPEANER: 10" speaker, the field winding of which acts as filter choke. DC resistance of field soil, cold - 1800 ohms. DC resistance of voice coil - 2 ohms. 400 cycle impedance of voice coil 2.3 ohms. VALVES: 6J8G, 607G, 6B8G, 6V6G, 5Y3G. TONF MONITOR: This is a 4-position switch. The following effects are secured in the various switch positions: lst Position (Wide Range): Normal bass response and treble boosted to compensate for side-band attentuation. For highest fidelity. 2nd Position: (Normal): Normal bass and small degree of treble cut. For normal and long-distance reception. 3rd Position (Bass): As in "Normal" position, but additional treble cut, for reduced background noise, and particularly for pick-up operation. 4th Position (Speech) Boosted treble response and bass cut, for improved intelligibility of speech.



HIS MASTER'S VOICE 550 (Continued)

IFT2-2nd I.F. T1 - Output T2 - Mains Ll&L2-B/C L3&L4-B/C TCl&TC2- air trimmer Trans. Trans. aer. coil Osc. coil 1.5-18mmfd
TS1 - Fixed trimmer shunt 7 mmfd

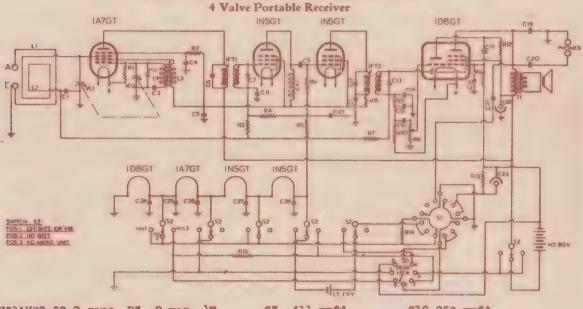
VOLTAGE TABLE

Values given are plus or minus 10% with receiver tuned to point of no reception, broadcast band, with line voltage of 240 volts (mains transformer primary tap set for 240 volts). If a voltmeter having less than 1000 ohms per volt is used, allowance must be made for the voltage drop caused by the voltmeter.

	6J8G	6070	6B8G	6V6G
Plate to chassis volts	266	266	43	253
Screen to chassis volts - B/C band	100	100	11	266
Cathode to chassis volts	400	600	-	12.5
Plate currents M/A	1.0	8.6	0.3	46
Screen current M/A	2.2	1.9	0.1	4.5

Rectifier filament - 5.2 volts. Heater - 6.4 volts. Input to filter - 420 volts. Output from filter - 266 volts. Total HT current in speaker field (measured at socket - 70 m/a.

HIS MASTER'S VOICE 601



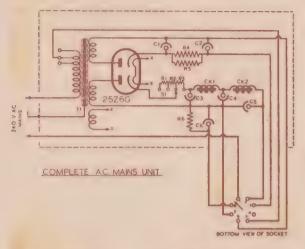
VCl&VC2-SC 2 gang R3 -2 meg. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	C3 -411 mmfd C401mfd 600V C51mfd 200V C6 -100 mmfd C7 -50 mmfd C802mfd 400V C9 -500 mmfd C1002mfd 400V C111mfd 200V C12-100 mmfd C13-100 mmfd C14-100 mmfd C15-100 mmfd C1601mfd 600V C1701mfd 600V	C18-250 mmfd C19 - 2000 mmfd C2002mfd 400V C2101mfd 600V C22 - 4 mfd 150PV elect.
--	---	---

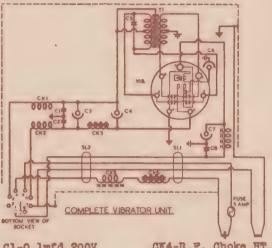
L.T. and H.T. supply may be obtained from any of the following sources: (1) Self-contained dry batteries: L.T.: One Ever-Ready 1.5-volt battery (Type P.R.B.).
H.T.: Two Ever-Ready 45 volt batteries (Type P.R. 45). (2) External dry batteries:
L.T.: One Ever-Ready 1.5 volt battery (Type X250). H.T.: Two Ever-Ready 45 volt batteries (Type Superdyne or Heavy Duty). (5) External vibrator power unit with 2-volt accumulator. (4) External A.C. mains power unit.

HIS MASTER'S VOICE 601 (Continued)

CONSUMPTION: (1) Self-contained batteries (L.T.) 0.25 amp. (H.T.) 8.5 ma.
(2) External batteries (L.T.) 0.25 amp. (H.T.) 8.5 ma. (3) Vibrator power unit 1.2 amps. (4) A.C. mains power unit - 19 watts. SPEECH OUTPUT - 200 milliwatts
(plate circuit). INTERMEDIATE FREQ.: 457.5 kc. WAVE-LENGTH RANGE: 200-545 met.
(1500-550 kc.). VALVES: 1A7GT Converter. 1N5GT 1st I.F. 1N5GT 2nd I.F.
1D8GT Demod., A.V.C., 1st A.F. and Power. LOUDSPEAKER: Permanent magnet dynamic type. 5" model, with a voice coil impedance of 3.6 ohms at 400 cycles.

NOTE: Further information re this Model will be found incorporated in Model 600, of the previous volume of this book.





Rl -15 ohms W/W R2 -10 ohms W/W C4 -200mfd 40PV elec. C5 -200mfd 40PV 99 . . C6 -5mfd 40PV R3 -10 ohms W/W CK1 - L.T. choke CK2 -L.T. filter chk. R4 -12,000 ohm lW R5 -12,000 ohm 1W Tl - mains trans. C1 -12mfd 350PV el C2 -16mfd 350PV "

C3 -100mfd 75PV

S1- Switch R6 -270 ohms W/W

CK4-R.F. Choke HT. C1-0.lmfd 200V T1 -Vib. Trans. CK5-R.F. choke LT CK6-L.T. choke Vib.-Oak ZV split C2-0.1mfd 200V C3-24mfd 150PV elec. C4-8mfd 525PV elec. C5-.007mfd 1000V C6-50mfd 40V elec. reed vibrator C7-400mfd 12PV elec. C8-0.lmfd 200V SL1-Shielded battery cable CKl&CK2-double RF chk.SL2-Shielded cable & socket CK3-H.T. choke

VOLTAGE TABLES

The receiver should be tuned to a point of no reception. Values given are plus or minus 10%. All voltage readings are taken on the 250 volt scale of a 1000 ohms per volt meter. If a voltmeter of less than 1000 ohms per volt is used, allowance must be made for the voltage drop caused by the voltmeter.

THE THE TOTAL TANGENTS OF THE PARTY OF THE

RECRIVER ORRD WILL	H INTERNAL	OR EXT	EKNAL DAI	ID86	T
	1A7GT	1N5GT	1N5GT	Triode	Pentode
Plate to chassis volts	81	81	75	17	80
Plate current (ma.)	.25	1.0	1.0	.05	5.1
Osc. plate to chassis volts	81	-	-		-
Osc. plate current (ma.)	1.4	-	-	•	-
Screen to chassis volts	30	81	81	- ·	81
Screen current (ma)	0.7	0.25	0.25	-	0.7
Filament volts	1.4	1.4	1.4	1.4	1.4
Bias volts	-8.5	-	-	-	-
Total HT current (ma)	8.5	400	_	-	**
Total LT current (ma)	250	da	140	**	-

RECEIVER USED WITH VIBRATOR POWER UNIT

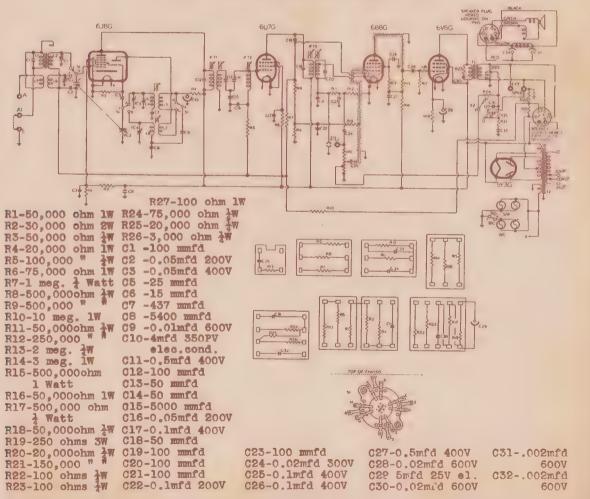
				1D8GT		
Plate to chassis volts Plate current (ma)	1A7GT 84 0.25	1N5GT 84 1.0	1N5GT 77 0.9	Triode 17 0.05	Pentode 82 3.2	
Osc. plate to chassis volts	84		-	-	-	
Osc. plate current (ma)	1.3	-	-	40		

HIS MASTER'S VOICE 601 (Continued)

				10	8GT
	1A7GT	1N5GT	1N5GT	Triode	Pentoda
Screen to chassis volts	34	84	84	es .	84
Screen current (ma)	0.6	0.25	0.3		0.8
		1.4	1.4	1.4	1.4
	-8.6	-	400	-	-
Total HT current (ma)	8.6	400	-	**	-
Total LT current (ma)	250	40	-	-	-
RECI	EIVER USED	WITH A	.C. MAINS UNIT	108	GT.
	1A7GT	1N5GT	1N5GT	Triode	Pentode
Plate to chassis volts	82	82	76	16	· 8 2
Plate current (ma)		0.8	0.9	0.05	3.2
Osc. plate to chassis volts	82	40	-	-	-
Osc. plate to current (ma)		-	esh.	-	-
	31	82	82	ghr	82
Gereen current (ma)	0.6	0.2	0.2	Nah.	0.7
LT + to chassis volts	5.6		-	**	-
Bias volts	88	-	-	**	-
Total HT current (ma)	8	-	-	-	-
Total LT current (ma)	100	-	-	-	-

HIS MASTER'S VOICE 660

5 Valve A.C. Dual Wave Receiver



HIS MASTER'S VOICE 660 (Continued)

C33-0.lmfd 200V C34-16mfd 550V elec. cond. C35-16mfd 350V elec. cond.reg.type 1Ft1-1st IF trans.

1FT2-2nd IF trans. 1FT3-3rd IF trans. VClAVC2-417mmfd 2 gang cond. VR1-1 meg. pot. tapped S2-Tone monit.
switch dial lamp
6.3V 0.3 amp.
T1-Output Trans.
T2-Vains trans.
L1%12-B/C aer. coil

L3&1.4-R/C oscillator coil L5&L6-S/W aer coil L7&L8-C/W osc. coil TC1,TC2;TC3,TC4-air trimmer 1.5-18mmfd S1-Wave change swtch.

CONSUMPTION: 82 Watts. WAVE LENGTH RANGE: 13.9 metres (21.57 megacycles) to 47 met. (6.38 megacycles). 187.5 metres (1600 kc) to 545 metres (550 kc.)
INTERMEDIATE FREQ.: 457.5 kc. MAX. UNDIGHTER POWER OUTFUT: 4.5 watts. LOUDGPKR.: 12°, the field winding acting as filter choke. DC resistance of field ceil, cold: 1800 ohms. DC resistance of voice ceil: 2 ohms. 400 cycle impedance of voice ceil: 2.35 ohms. VALVES: 6J80, 6U7G, 6B8G, 6V6G, 5Y30.
TONE MONITOR: This is a four-position switch. The following effects are secured in the various switch positions: 1st Position (*ide Pange): Normal base response, and trable boosted to compensate for side-band attenuation. For highest fidelity. 2nd Position (Normal): Normal base and small degree of trable cut. For normal and long-distance reception. 3rd Position (Bass): As in "Normal" position, but addittable cut, for reduced background noise and particularly for pick-up operation. 4th Position (Speech': Boosted trable response and base cut, for improved intelligibility of speech.

VOLTAGE TABLE

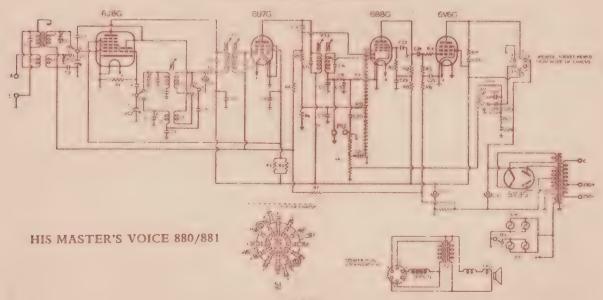
Values given are plus or mirus 10% with receiver tuned to point of no reception, broadcast band, with line voltage of 240 volts (meins transformer primary tap set for 240 volts). If a voltmeter having less than 1000 ohms per volt is used, allowance must be made for the voltage drop caused by the voltmeter.

	979				
	BC Band	SW Band	607G	6B8G	6V6G
Plate to chassis volts	270	268	270	45	260
Screen to chassis volts	103	106	. 105	12	270
Cathode to chassis volts	es es		with	~	12.5
Screen current M/A	3.2	3.0	2.1	0.1	3.7
Plate current M/A	1.4	1.5	8.6	0.4	44.0
Plate current Osc. Section M/A	5.5	5.5	-		
Plate voltage Osc. Section	157	155	-	_	-

Rectifier filament - 5.0 volts. Heaters - 6.4 volts. Input to filter (to C/T of HT winding) - 430 volts. Output from filter (to chassis) - 270 volts. Total HT current in speaker field (measured at terminal 6 of speaker socket) - 72 M/A

HIS MASTER'S VOICE 880/881 & 110/111

5 Valve A.C. Dual Wave Receivers



HIS MASTER'S VOICE 880/881 (Continued)

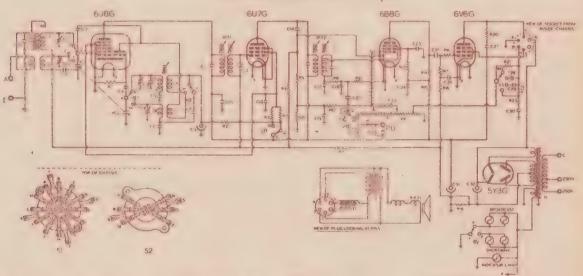
R1 -50.000 ohm 3W
R2 -20,000 ohm 1W
R3 -75,000 ohm 1W
(2)
R4 -1 meg. 1W
R5 -500,000 ohm 1W
R6 -500,000 ohm W
R7 -10 meg. 1W
R8 -50.000 ohm 1W
R9 -250,000 ohm \{ W
R10-2 meg. 2W
R11-5 meg. iw
R12-500.000 ohm 1W
R13-50,000 ohm 1W
R14-50.000 ohm 1W
R15-500,000 ohm 1W
R16-250,000 ohm 4W
R17-250 ohm 3W

```
R18-500 ohm 1W
R19-200,000 ohm \{\frac{1}{4}}\text{W}
R20-30,000 ohm 1W
R21-3000 ohm 17
Cl -100 mmfd
C2 - 0.05mfd 200V
C3 -2.3mmfd neut.
C4 -26 mmfd
C5 -15 mmfd
C6 -437 mmfd
C7 -5400 mmfd
08 -0.01mfd 600V
C9 -4mfd 525PV elec.
C10-0.5mfd 400V
C11-100 mmfd
C12-100 mmfd
C13-0.1mfd 400V
C14- 50mmfd
```

C15-100 mmfd
216-100 mmfd
C17-100 mmfd
C18-100 mmfd
C19-0.1mfd 200V
020-0.02mfd 400V
021-0.1mfd 200V
22-0.02mfd 4COV
023-0.5mfd 400V
024-0.02mfd 600V
025-0.05mfd 400V
026-0.01mfd 600V
27-500 mmfd
028-0.002mfd 600V
229-0.1mfd 200V
030-14mfd 525PV el
031-8mfd 600PV el.

VC18:VC2-417 mmfd 2 gang cond. VR1-1 meg. potent. S1-Wave change switch 1FT1-1st IF trans. 1FT2-2nd IF trans. Tl - Mains trans. T2 - Output trans. S2 - Tone monitor switch dial lamps 6.3V 0.15 amp Ll&L2-B/C aer. coil L3&L4-B/C osc. coil L5&L6-S/W aer. coil L7&L8-S/W osc. co11 TC1,TC2,TC3 & TC4 air trimmer 1.5-18 mmfd

HIS MASTER'S VOICE 110/111



R1 -50,000 ohm ½W
R2 -20,000 ohm 1W
R3 -75,000 ohm 1W
(2)
74 -1 msg. ½ Watt
R5 -500,000 ohm ½W
R6 -500,000 ohm ½W
R7 -10 msg. 1 W
R8 -50,000 ohm ½W
R10-2 msg. ½ W
R11-1 msg. ½ W
R12-100,000 ohm ½W
R13-3 msg. 1 Watt
R14-500,000 ohm 1W
R15-50,000 ohm 1W
R15-50,000 ohm ½W
R17-500,000 ohm ½W

R19-250 ohms 3W R20-500 ohms 1W R21-200,000 ohm 3W R22-30,000 ohm W R25-3000 ohms 1W C1 -100 mmfd C2 -0.05mfd 200V C3 -2.3mmfd neut. 04 -25 mmfd C5 -15 mmfd C6 -437 mmfd C7 -5400 mmfd. 08 -0.01mfd 600V C9 -4mfd 525PV el. C10-0.5mfd 400V C11-100 mmfd C12-100 mmfd C13-0.1mfd 400V C14-50 mmfd

C15-1CO mmfd C16-100 mmfd C17-100 mmfd C18-100 mmfd C19-0.1mfd 200V C20-0.02mfd 400V 021-100 mmfd C22-0.1mfd 200V C23-0.02mfd 400V C24-0.5mfd 400V 025-0.02mfd 600V C26-0.05mfd 400V C27-0.01mfd 600V C28-500 mmfd C29-0.002mfd 600V C30-0.lmfd 200V C31-14mfd 525PV el. C32-8mfd 600PV el

VC1&VC2-417mmfd 2
gang cond.

VR1 -1 meg. pot
Sl&\$2-Wave change &
R/G switch
1FT1-1st IF trans.
1FT2-2nd IF trans.
T1 - Wains trans.
T2 - Output trans.
S3-Tone monitor switch
disl lamps 6.3V
0.15 amp.
Ll&L2-B/C aer coil
L5&L6-S/W aer. coil
L7&L8-S/W osc. coil
TC1,TC2,TC3&TC4-air
trir. 1.5-18mmfd

CONSUMPTION: Model 880/881 - 60 watts. Model 110/111 - 76 watts. WAVE-LENGTH RANGE: 13.9 metres (21.59 megacycles) to 46 metres (6.53 megacycles). 127.5 met. (1600 kc.) to 545 metres (550 kc.). MAX. UNDISTORTED POWER: 3 watts. LOUDSPER: Models 880/88: & 110/111 use 6" and 8" speakers respectively, the field windings of which act as filter chokes. DC resistance of field coil, cold 2000 ohms. DC resistance of voice coil - 3.4 ohms.

151.

HIS MASTER'S VOICE 880/881 & 110/111 (Continued)

VALVES: 6J8G. 6U7G, 6889, 6V6G, 5Y3G. TONE MONITOR: Same as Mode J5O.
VOLTAGE TABLE: Values given are plus or minus 10% with receiver tuned to a
point of no reception, b/cast band with line voltage of 240 volts (mains transformer primary tap set for 240 volts). If a voltmeter having a resistance of less
than 1000 ohms per volt is used, allowance must be made for voltage drop caused by
the voltmeter.

	6J8G	6070	6B 8G	6V6G
Plate to chassis volts	236	236	46	218
Screen to chassis volts B/C Band	85-180*	85	15	236
Screen to chassis volts S/W Band	87	`87	en en	-
Plate currents M/A	1.0	7.4	0.3	31
Screen current M/A	2.5	1.8	0.1	1.7

H.T. centre tap to chassis - 13 volts. Rectifier fllament - 4.9 volts. Heaters - 6.2 volts. Input to filter (measured to chassis) - 340 volts. Output from filter (measured to chassis) - 236 volts. H.T. total current in speaker field (measured at socket) = 52 M/A.

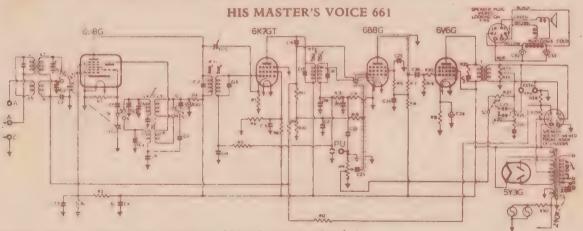
* Receiver tuned to strong signal.

NOTE: For information re Automatic Brake, see previous volume of this book.

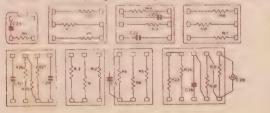
HIS MASTER'S VOICE 661 5 Valve Dual Wave A.C. AND

540 & 541 Dual Wave A.C. Radiograms

VOLTAGE RANGE: 200 to 260 volts, 40 to 60 cycles. It is important that the receiver be operated at the correct voltage; the voltage taps on the mains transformer should be utilized as follows: - 200-220 volts A.C. - Tap 200. 221-240 A.C. volts - Tap 240. 241-260 A.C. volts - Tap 260. CONSUMPTION: Model 661 - 73 watts. Models 541 and 540 (Radio) 73 watts. (Gram.) 90 watts.



WAVE LENGTH RANGE: 13.9 metres (21.57 megacycles) to 17 metres (6.38 megacycles). 187 metres (1600 kc) to 545 metres (550 kc.). MAX. UNDISTORTED POWER OUTPUT: 4.5 watts. LOUDSPEAKER: Models 661 and 541 - 12" speaker. Model 540 - 10". The field winding acting as filter choke. D.C. resistance of field coil, cold - 1800 ohms. D.C. resistance of voice coil - 2 ohms. 400 cycle impedance of voice coil - 2.35 ohm



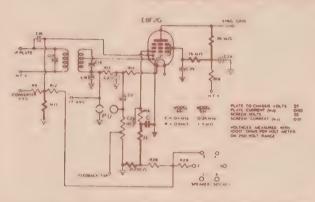


R1 - 100,000 obms 1 Watt
R2 - 30,000 obms 2 "
R3 - 50,000 obms 1 "
R4 - 20,000 obms 1 "
R5 - 2 meg. 1 Watt
R6 - 75,000 obms 1 Watt
R7 - 1,000 obms 1 "
R8 - 75,000 obms 1 "
R8 - 1 meg. 1 Watt
R10- 500,000 obms 1 "
R11- 500,000 obms 1 "
R12- 10 meg. 1 Watt
R13- 50,000 obms 1 Watt
R14- 250,000 obms 1 Watt

HIS MASTER'S VOICE 661 (Continued)

R16-3 mag. 1 Watt C5 -25 mmfd C24-0.5mfd 400V S2 -Tone Mon .Switch R17-500.000 ohm lW C6 -15 mmfd C25-0.lmfd 400V Tl -Output trans. 1W C7 -437mmfd R18-50,000 ohm C26-0.02mfd 600V T2 -Mains trans. R19-500,000 ohm W C8 -5400 mmfd C27-0.02mfd 600V Ll&L2 -B/C aer. R20- 50,000 ohm W C9 -0.01mfd 600V C28-5mfd 25PV coil C29-0.002mfd600V L3&L4- B/C osc. R21- 250 ohma 3W Clo-4mfd 350PV C30-0.002mfd * 11 R22- 100 ohms 1W Cll-0.0lmfd 600V coil C12-100 mmfd C31-0.lmfd 200V R23- 100 ohms 1W L5&L6-S/W aer. C13-100 mmfd C32-16mfd 550PV R24-100 ohma \ \ coil C33-16mfd 350PV C14-0.02mfd 400V R25-20,000 ohm 14 L7&L8-S/W osc. G15-0.lmfd 400V reg. type R26-3,000 ohm \text{\frac{1}{2}}W coil C16-50 mmfd TC1,TC2,TC3&TC4 -VClavC2-417mmfd R27-75,000 ohm 1W 017-200 mmfd R28-20,000 ohm W 2 gang cond. Air trim. 1.5-R29-150,000 ohm C18-200 mmfd VR1-1 meg.pot. 18mmfd C19-100 mm fd tapped R30- 2 ohm TC5 - Variable C1 - 50 mmfd C20-100 mm fd S1-Wave change neut. cond-021-0.25mfd 200V switch C2 -0.05mfd 200V enser. C22-0.02mfd 400V 1FT1-1st IF tran. C3 -0.05mfd 400V C23-0.lmfd 400V 1FT2-2nd 04 -0.5mfd 400V

MODIFICATIONS FOR MODELS 661 & 541



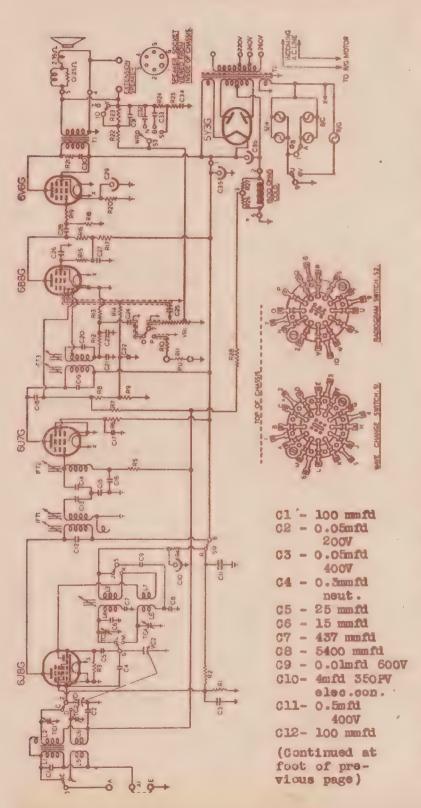
About the middle of 1941. number of Models 661 and 541 were manufactured in which Philips type RBF20 valve Wa3 substituted for the 6B8G normally used, due to shortage the latter type through Defence requirements. This stitution necessitated certain circuit alterations in stage, as follows:-(a) Plate and screen resistors changed from 0.5 meg. and 3 meg to 0.25 meg. and 0.75 meg.res-

(b) Grid circuit removed from A.V.C. line and returned to fixed bias of -1.6 volts obtained from voltage divider system across speaker field. The revised circuit diagram affecting this part of the receiver is given above. Modifications are shown in heavy lines, and voltages are indicated.

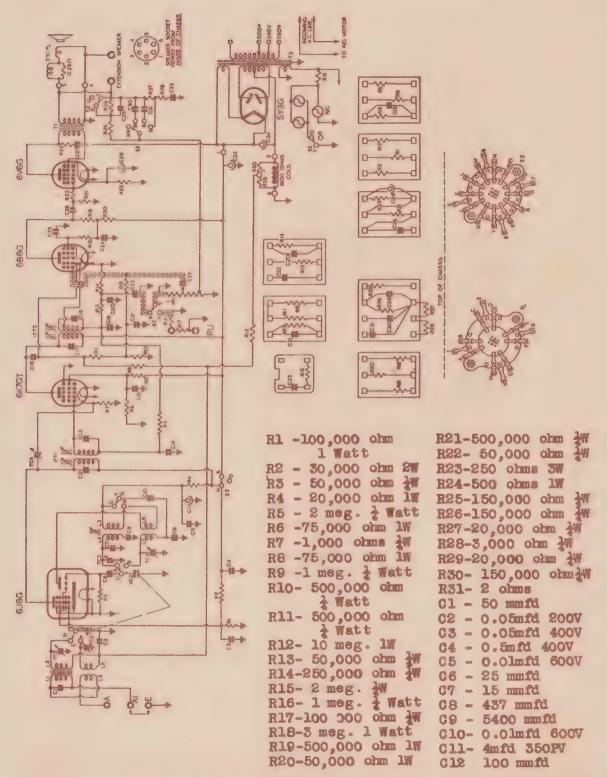
HIS MASTER'S VOICE 540 (Continued)

pectively.

C13- 50 mmfd C14- 50 mmfd	C27-0.5mfd 400V C28-0.02mfd 600V	VC1&VC2- 417mmfd	Ll&L2 - B/C aerial
C15- 5000 mmfd	C29- 5mfd 25V elec	.VR1-1 meg.pot.tap	L3&L4 - B/C osc.
C16- 0.05mfd 200V	cond.	\$3 -Tone monitor	coil
C17- 0.lmfd 400V	030-0.02mfd 600V	switch	L5&L6 -3/W aer.
C18-50 mm fd	C31- 0.01mfd 600V	Dial lamp 6.3V	coil
C19-100 mmfd	C32- 500 mmfd	o.3 amp.	L7&L8-S/W osc.
C20-100 mm fd	C33- 2000 mmfd	lFT1-1st IF tran.	coil
C21- 100 mm fd	C34- 0.lmfd 200V	1FT2-2nd IF tran.	TC1,TC2,TC3 & TC4-
C22- 0.lmfd 200V	C35- 16mfd 350V	IFT3-3rd IF tran.	Air trimmer 1.5-
023- 100 mm fd	reg. type	Tl - Output tran-	18 mm fd
024-0.02mfd 300V	C36- 16mfd 550V	sformer	
G25-0.lmfd 400V	elec. cond.	T2 - Mains trans-	
C26- 0.lmfd 400V		former	



R1 - 50,000 ohms 1 Watt - 30,000 ohma 2 Watt R3 - 50,000 ohms 1/4Watt R4 - 20,000 ohms 1 Watt R5 - 100,000 ohms 1 Watt 75,000 ohms 1 Watt R7 - 1 megohm 1/4Watt R8 - 500,000 ohms 1 Watt 500,000 ohms - Watt R10- 1 megohm 1/4 Watt R11- 100,000 ohms 1 Watt R12- 50,000 ohms 1/4 Watt R13- 250,000 ohms + Watt R14- 2 megohms 1/4 Watt R15- 3 megohma 1 Watt R16- 500,000 ohma 1 Watt R17- 50,000 ohms 1 Watt R18- 500,000 ohms 1 Watt R19- 50,000 ohms Watt R20- 250 ohma 3 Watt R21- 500 ohms 1/4 Watt R22- 150,000 ohms 1/4 Watt R23- 150,000 ohms 1/4 Watt R24-20,000 ohms 1/4Watt R25- 3000 ohms 1/4 Watt R26- 20,000 ohma 1/4 Watt R27- 150,000 obms 1/4 Watt R28- 10 megohms 1 Watt



HIS MASTER'S VOICE 541 (Continued)

C13- 100 mm fd	027-0.02mfd 600V	lFT1-Jst IF	L7 &L8-S/W osc11-
C14-0.02mfd 400V	C28-5mfd 25PV	trans.	lator coil
C15-0.lmfd 400V	C29-0.0lmfd 600V		TC1,TC2,TC3 & TC4-
C16- 50 mmfd	C30-500 mmfd	trans.	Air trimmer
C17- 200 mmfd	C31- 2000mm fd		1.5-18mmfd
C18- 200 mmfd	C32- 0.lmfd 200V	trans.	TC5- var. neut.
C19- 100 mmfd	C33- 16mfd 350PV	T2 - Mains	cond.
C20- 100 mmfd	C34-16mfd 550PV	trans.	S1- Wave change
U21-0.25mfd 200V	reg. type	Ll&L2-B/C aer.	switch
C22-0.02mfd 400V	VCl&VC2-417mmfd	coil	S2 - Radiogram
023-0.lmfd 400V	2 gang cond.	L3&L4- B/C osc.	switch
C24-0.5mfd 400V	VR1-1 meg. pot.	coil	S3 -Tone mon.swt.
C25-0.lmfd 400V	tapped	L5&L6- S/W aer.	dial lamp 6.3V
C26-0.02mfd 600V		coil	0.3 amp.

VOLTAGE TABLE - (Models 661 and 541)

Values given are plus or minus 10% with receiver tuned to point of no reception, b/cast band, with line voltage of 240 volts (mains transformer primary tap set for 240 volts). If a voltmeter having less than 1000 ohms per volt is used, allowance must be made for the voltage drop caused by the voltmeter.

		J8G	6K7GT	6B 8G	6V 6G
Screen current (ma) Plate to chassis volts	4.3 275	158	1.1 275	0.07	3.0
Plate current (ma)	1.9	6.0	4.2	0.4	45
Screen to chassis volts	118	-	100	11	275
Cathode to chassis volts	-	-	5.0	_	13

Rectifier filament - 5.0 volts. Heaters - 6.3 Volts. H.T. input to filter - 428 volts. H.T. output from filter - 275 volts. Total H.T. current (measured at terminal 6 of speaker socket) - 68 ma. Pilot lamps - 5.5 volts.

VOLTAGE TABLE - (Model 540)

	6J8G	6U7G	6B 8G	6V 6G
Plate to chassis volts	258	258	35	248
Screen to chassis volts - B/C Band	90	84	10	258
Screen to chassis volts - S/W band	100	92		-
Cathode to chassis volts	-	-	-	13.0
Plate currents M/A	1.5	9.1	0.3	46
Screen current M/A	3.5	2.2	0.1	4.8

Rectifier filament - 5.2 volts. Heater - 6.5 volts. Input to filter - 418 volts. Output from filter - 260 volts. Total HT current in speaker field (measured at socket) - 75 M/A.

NOIE: For information re Automatic Brake, see previous volume of this book.

MEMORANDA

Conversion Table

FREQUENCY—WAVELENGTH 10.1 to 29,690 Metres

WAVELENGTH—FREQUENCY 29,690 to 10.1 Kcs.

KCS	М	KCS	М	KCS	М	KCS	M	KCS	. M	KCS	м	KCS	М	KCS	м	KCS	М
10 1	29,690	20.1	14,920	30.1	9,961	40.1	7,477	50.1	5,984	60.1	4,989	70 1	4,277	80 1	3,743	90.1	3,328
10.2	29,390	20.2	14,840	30.2	9,928	40.2	7,458	50.2	5,973	60.2	4,988	70 2	4,271	80.2	3,738	90.2	3,324
10.3	29,110	20.3	14,770	30.3	9,895	40.3	7,440	50.3	5,961	60.3	4,972	70.3	4,265	80 3	3,734	90.3	3,320
10.4	28,830	20.4	14,700	30.4	9,862	40.4	7,421	50.4	5,949	60.4	4,964	70 4	4,259	80 4	3,729	90.4	3,317
10.5	28,550	20.5	14,630	30.5	9,830	40.5	7,403	50.5	5,937	60.5	4,954	70.5	4,253	80.5	3,724	90.5	3,313
10.6	28,280	20.6	14,550	30.6	9,798	40.6	7,385	50.6	5,925	60 6	4,948	70 6	4,247	80.6	3,720	90.6	3,309
10.7	28,020	20.7	14,480	30.7	9,766	40.7	7,367	50.7	5,913	60.7	4,939	70.7	4,24t	80.7	3,715	90.7	3,306
10.8	27,760	20.8	14,410	30.8	9,734	40.8	7,349	50.8	5,902	60.8	4,931	70.8	4,235	80.8	3,711	90.8	3,301
10.9	27,510	20.9	14,350	30.9	9,70	40.9	7,331	50.9	5,890	60.9	4,923	70.9	4,229	80.9	3,706	90.9	3,298
11.0	27,260	21.0	14,280	31.0	9,672	41.0	7,313	51.0	5,879	61.0	4,915	71.0	4,223	81.0	3,701	91.0	3,295
11.1 11.2 11.3 11.4 11.5	27,010 26,770 26,530 26,300 26,070	21.1 21.2 21.3 21.4 21.5	14,210 14,140 14,080 14,010 13,950	31.1 31.2 31.3 31.4 31.5	9,641 9,610 9,579 9,548 9,518	41.1 41.2 41.3 41.4 41.5	7,295 7,277 7,260 7,242 7,225	51.1 51.2 51.3 51.4 51.5	5,867 5,856 5,844 5,833 5,822	61 1 61.2 61.3 61.4 61.5	4,907 4,899 4,891 4,883 4,875	71.1 71.2 71.3 71.4 71.5	4,217 4,211 4,211 4,205 4,199 4,193	81.1 81.2 81.3 81.4 81.5	3,697 3,692 5,688 3,683	91.1 91.2 91.3 91.4 91.5	3,291 3,288 3,284 3,280 3,277
11.6 11.7 11.8 11.9 12.0	25,858 25,630 25,410 25,200 24,990	21.6 21.7 21.8 21.9 22.0	13,880 13,810 13,750 13,690 13,630	31.6 31.7 31.8 31.9 32.0	9,488 9,458 9,428 9,399 9,369	41.6 41.7 41.8 41.9 42.0	7,207 7,190 7,173 7,156 7,139	51.6 51.7 51.8 51.9 52.0	5,810 5,799 5,788 5,777 5,766	61.6 61.7 61.8 61.9 62.0	4,867 4,859 4,851 4,844 4,836	71.6 71.7 71.8 71.9 72.0	4,187 4,182 4,176 4,170 4,164	81.6 81.7 41.8 81.9 82.0	3,679 3,674 3,679 3,665 3,661 3,656	91.6 91.7 91.8 91.9 92.0	3,273 3,270 3,266 3,262 3,259
12.1	24,780	22.1	13,570	32.1	9,348	42.1	7,122	52.1	5,755	62.1	4,828	72 1	4.158	82.1	3,652	92.1	3,255
12.2	24,580	22.2	13,510	32.2	9,311	42.2	7,105	52.2	5,744	62.2	4,820	72 2	4,153	82.2	3,647	92.2	3,252
12.3	24,380	22.3	13,440	32.3	9,282	42.3	7,088	52.3	5,733	62.3	4,813	72.3	4,147	82.3	3,643	92.3	3,248
12.4	24,180	22.4	13,380	32.4	9,254	42.4	7,071	52.4	5,722	62.4	4,805	72 4	4,141	82.4	3,639	92.4	3,245
12.5	23,990	22.5	13,330	32.5	9,225	42.5	7,055	52.5	5,711	62.5	4,797	72.5	4,135	82.5	3,634	92.5	3,241
12.6	23,800	22 6	13,270	32.6	9,197	42 6	7,038	52.6	5,700	62.6	4,789	72.6	4,130	82 6	3,630	92.6	3,238
12.7	23,610	22.7	13,210	32.7	9,169	42.7	7,022	52.7	5,689	62.7	4,782	72.7	4,124	82 7	3,625	92.7	3,234
12.8	23,420	22.8	13,150	32.8	9,141	42.8	7,005	52.8	5,678	62.8	4,774	72.8	4,118	82 8	3,621	92.8	3,238
12.9	23,210	22 9	13,090	32.9	9,113	42 9	6,989	52.9	5,668	62.9	4,767	72.9	4,113	82.9	3,617	92.9	3,227
13.0	23,060	23.9	13,040	33.9	9,086	43.0	6,973	53.0	5,657	63.0	4,759	73.0	4,107	83.0	3,612	93.0	3,227
13.1	22,890	23.1	12,980	33.1	9,058	43.1	6,956	53.1	5,646	63.1	4,752	73.1	4,18½	83.1	3,608	93.1	3,220
13.2	22,710	23.2	12,920	33.2	9,031	43.2	6,940	53.2	5,636	63.2	4,744	73.2	4,096	83.2	3,604	93.2	3,217
13.3	22,540	23.3	12,870	33.3	9,004	43.3	6,924	53.3	5,625	63.3	4,736	73.3	4,090	83.3	3,599	93.3	3,214
13.4	22,370	23.4	12,810	33.4	8,977	43.4	6,908	53.4	5,615	63.4	4,729	73.4	4,085	83.4	3,595	93.4	3,210
13.5	22,210	23.5	12,760	33.5	8,950	43.5	6,892	53.5	5,604	63.5	4,722	73.5	4,079	83.5	3,591	93.5	3,207
13 6	22,040	23.6	12,700	33.6	8,923	43.6	6,877	53.6	5,594	63.6	4,714	73.6	4,074	83.4	3,586	93.6	3,203
13.7	21,880	23.7	12,650	33.7	8,897	43.7	6,861	53.7	5,583	63.7	4,707	73.7	4,068	83.7	3,582	93.7	3,200
13 8	21,730	23.8	12,600	33.8	8,870	43.8	6,845	53.8	5,573	63.8	4,699	73.8	4,063	83.8	3,578	93.8	3,196
13 9	21,570	23.9	12,540	33.9	8,844	43.9	6,830	53.9	5,563	63.9	4,692	73.9	4,057	83.9	3,574	93.9	3,193
14.0	21,420	24.0	12,490	34.0	8,818	44.0	6,814	54.0	5,552	64.0	4,685	74.0	4,052	84.0	3,569	94.0	3,190
14 1 14 2 14.3 14.4 14.5	21,260 21,110 20,970 20,820 20,680	24 1 24 2 24 3 24 4 24.5	12,448 12,398 12,349 12,290 12,240	34.2 34.3 34.4 34.5	8,792 8,767 8,741 8,716 8,690	44.1 44.2 44.3 44.4 44.5	6,799 6,783 6,768 6,753 6,738	54.1 54.2 54.3 54.4 54.5	5,542 5,532 5,522 5,511 5,501	64.1 64.2 64.3 64.4 64.5	4,677 4,670 4,663 4,656 4,648	74.1 74.2 74.3 74.4 74.5	4,046 4,041 4,035 4,030 4,024	84.1 84.2 84.3 84.4 84.5	3,565 3,561 3,557 3,552 3,548	94.1 94.2 94.3 94.1 94.5	3,186 3,183 3,179 3,176 3,173
14 6	20,540	24 6	12,190	34.6	8,645	44.6	6,722	54.6	5,491	64.6	4,641	74.6	4,019	84.6	3,544	94.6	3,169
14.7	20,400	24 7	12,140	34.7	8,640	44.7	6,707	54.7	5,484	64.7	4,634	74.7	4,014	84.7	3,548	94.7	3,166
14.8	20,260	24.8	12,090	34.8	8,616	44.8	6,692	54.8	5,471	64.8	4,627	74.8	4,008	84.8	3,536	94.8	3,163
14 9	20,120	24 9	12,040	34.9	8,591	44.9	6,678	54.9	5,461	64.9	4,629	74.9	4,003	84.9	3,531	94.9	3,159
15 0	19,990	25.0	11,990	35.0	8,566	45.0	6,663	55.0	5,451	65.0	4,613	75.0	3,998	85.0	3,527	95.0	3,156
15 1	19,860	25.1	11,950	35.1	8,542	45.1	6,648	85.1	5,441	65.1	4,686	75.1	3,992	85.1	3,523	95.1	3,153
15 2	19,720	25.2	11,900	35.2	8,518	45.2	6,633	55.2	5,432	65.2	4,598	75.2	3,987	85.2	3,519	95.2	3,149
15 3	19,600	25.3	11,850	35.3	8,494	45.3	6,619	55.3	5,422	65.3	4,591	75.3	3,982	85.3	3,515	95.3	3,146
15.4	19,470	25.4	11,800	35.4	8,470	45.4	6,604	55.4	5,412	65.4	4,584	75.4	3,976	85.4	3,511	95.4	3,143
15.5	19,340	25.5	11,760	35.5	8,446	45.5	6,589	55.5	5 ₇ 402	65.5	4,577	75.5	3,971	85.5	3,507	95.5	3,139
15.6 15.7 15.8 15.9 16.0	19,220 19,100 18,980 18,860 18,740	25.6 25.7 25.8 25.9 26.0	11,710 11,670 11,620 11,580 11,530	35.7 35.8 35.9	8,422 8,398 8,375 8,352 8,352	45.6 45.7 45.8 45.9 46.0	6,575 6,561 6,546 6,532 6,518	55.6 55.7 55.8 55.9 56.0	5,392 5,383 5,373 5,364 5,354	65.6 65.7 65.8 65.9 66.0	4,570 4,563 4,557 4,550 4,543	75.6 75.7 75.8 75.9 76.0	3,966 5,961 3,955 3,950 3,945	85.6 85.7 85.8 85.9 86.9	3,503 3,490 3,494 3,490 3,486	95.6 95.7 95.8 95.9 96.0	3,136 3,133 3,130 3,126 3,123
16.1	18,620	26.1	11,490	36.1	8,305	46.1	6,504	56.1	5,344	66.1	4,536	76 1	3,940	86.1	3,482	96.1	3,129
16.2	18,510	26.3	11,448	34.2	8,282	46.2	6,490	56.2	5,335	66.2	4,529	76.2	3,935	86.2	3,478	96.2	3,117
16.3	18,396	26.3	11,400	36.3	8,260	46.3	6,476	56.3	5,325	66.3	4,522	76.3	3,929	86.3	3,474	96.3	3,113
16.4	18,280	26.4	11,360	36.4	8,237	46.4	6,462	56.4	5,316	66.4	4,515	76.4	3,924	86.4	3,470	96.4	3,110
16.5	18,170	26.5	11,310	36.5	8,214	46.5	6,448	56.5	5,307	66.5	4,509	76.5	J,919	86.5	3,466	96.5	3,107
16.6 16.7 16.8 16.9 17.0	18,660 17,950 17,850 17,740 17,640	26.6 26.7 26.8 26.9 27.0	11,270 11,230 11,190 11,150 11,100	36.6 36.7 36.8 36.9 37.0	8,192 8,170 8,147 8,125 8,103	46.6 46.7 46.8 46.9 47.0	6,434 6,420 6,406 6,393 6,379	56.6 56.7 56.8 86.9 57.0	5,297 5,288 5,279 5,269 5,260	66.6 66.7 66.8 64.9 67.0	4,592 4,495 4,488 4,482 4,475	76.6 76.7 76.8 76.9 77.0	3,944 3,909 3,904 3,894	86,6 86,7 86,8 86,9 87,0	3,462 3,458 3,454 3,450 3,446	96.6 96.7 96.8 96.9 97.0	3,104 3,101 3,097 3,094 3,091
17.1 17.2 17.3 17.4 17.5	17(530 17,430 17,330 17,330 17,130	27.1 27.2 27.3 27.4 27.5	11,068 11,028 10,980 10,940 10,900	37.8 37.2 37.3 37.4 37.5	8 081 8,060 8,078 8,017 7,995	47.1 47.2 47.3 47.4 47.5	6,366 6,352 6,339 6,325 6,312	57 1 57.2 57.3 57.4 57.5	5,251 5,242 5,232 5,223 5,214	67.1 87.2 67.3 67.4 67.5	4,468 4,462 4,455 4,448 4,442	77.1 77.2 77.3 77.4 77.5	3,884 3,879 3,874 3,869	87.1 87.2 87.3 87.4 87.5	3,442 3,438 3,434 3,430 3,427	97.1 97.2 97.3 97.4 97.5	3,888 3,085 3,081 3,078 3,075
17.6	17,040	27.6	10,860	37.6	7,974	47.6	6,299	57.6	5,205	67.6	4,435	77.6	3,864	87.6	3,423	97 6	3,072
17.7	16,940	27.7	10,820	37.7	7,953	47.7	6,286	57.7	5,196	67.7	4,429	77.7	3,859	87.7	3,419	97.7	3,069
17.5	16,840	27.8	10,780	37.8	7,932	47.8	6,272	57.8	5,187	67.8	4,422	77.8	3,854	87.8	3,415	97.8	3,066
17.9	16,750	27.9	10,750	37.9	7,911	47.9	6,259	57.9	5,178	67.9	4,416	77.9	3,849	87.9	3,411	97.9	3,063
18.0	16,660	28.0	10,710	38.0	7,890	48.0	6,246	58.0	5,169	68.00	4,409	78.0	3,844	88.0	3,407	98.0	3,059
18.1	16,569	28.1	10,670	38.1	7,869	48 1	6,233	58.1	5,160	68.1	4,403	78.1	3,839	88.1	3,403	98.1	3,056
18.2	16,470	28.2	10,630	38.2	7,849	48.2	6,220	58.2	5,152	68.2	4,396	78.2	3,834	88.2	3,399	98.2	3,053
16.3	16,380	28.3	10,590	38.3	7,828	48.3	6,207	58.3	5,143	68.3	4,390	78.3	3,829	88.3	3,395	98.3	3,050
18.4	16,290	28.4	10,560	38.4	7,808	48.4	6,195	58.4	5,134	68.4	4,383	78.4	3,824	88.4	3,392	98.4	3,047
18.5	16,210	28.5	10,520	38.5	7,788	48.5	6,182	58.5	5,125	68.5	4,377	78.5	3,819	88.5	3,388	98.5	3,044
18.6 18.7 18.8 18.9	16,120 16,030 15,950 15,860 15,780	28.6 28.7 28.8 28.9 29.0	10,480 10,450 10,410 10,370 10,340	38.6 38.7 38.8 38.9 39.0	7,767 7,747 7,727 7,707 7,688	48.6 48.7 48.8 48.9 49.0	6,169 6,156 6,144 6,131 6,119	58.6 58.7 58.8 58.9 59.0	5,116 5,108 5,099 5,090 5,082	68.6 68.7 68.8 68.9 69.0	4,371 4,364 4,358 4,352 4,345	78.6 78.7 78.8 78.9 79.0	3,814 3,810 3,805 3,800 3,795	88.6 88.7 88.8 88.9 89.0	3,381 3,380 3,376 3,373 3,369	98.6 RR.7 98.8 98.9 99.0	3,041 3,038 3,035 3,032 3,020
19.1 19.2 19.3 19.4 19.5	15,700 15,620 15,530 15,450 15,380	29.1 29.2 29.3 29.4 29.5	10,300 10,270 10,230 10,200 10,160	39.1 39.2 39.3 39.4 39.5	7,668 7,648 7,629 7,610 7,590	49.1 49.2 49.3 49.4 49.5	6,106 6,094 6,082 6,069 6,057	59.1 59.2 59.3 59.4 59.5	5,073 5,065 5,056 5,047 5,039	69.1 69.2 69.3 69.4 69.5	4,339 4,333 4,326 4,320 4,314	79.1 79.2 79.3 79.4 79.5	3,790 3,786 3,781 3,776 3,771	89.2 89.3 89.4 89.5	3,365 3,361 3,357 3,354 3,350	99.1 99.2 99.3 99.4 99.5	3,025 3,022 3,019 3,016 3,013
19.6 19.7 19.8 19.9 20.0	15,300 15,220 15,140 15,070 14,990	29.6 29.7 29.8 29.9 30.0	10,130 10,090 10,060 10,030 9,994	39.6 39.7 39.8 39.9 40.0	7,571 7,552 7,533 7,514 7,496	49.6 49.7 49.8 49.9 50.0	6,045 6,033 6,020 6,008 5,996	59.6 59.7 59.8 59.9 60.0	5,031 5,022 5,014 5,005 4,997	69 6 69.7 69.8 69 9 70.0	4,308 4,302 4,295 4,289 4,283	79 6 79 7 79 8 79.9 80.0	3,767 3,762 3,757 3,752 3,748	89.6 89.7 89.8 89.9 90.0	3,346 3,342 3,339 3,335 3,331	99.6 99.7 99.8 99.9	3,010 3,007 3,004 3,001
М	KCS	М	KCS.	М	KCS	M	KCS	M	KCS.	M	KCS	M	KCS	M	KCS.	М	KCS

HOTPOINT-BANDMASTER RADIO

Manufactured by Australian General Electric Ltd., 93 Clarence St., Sydney, N.S.W.

HOTPOINT-BANDMASTER B74MB

Valve, One Band, Dry Cell Battery Operated (Optional Power Supply),
Portable Superheterodyne

TUNING RANGE: "Standard Medium Wave" - 1600-550 Kc/s.

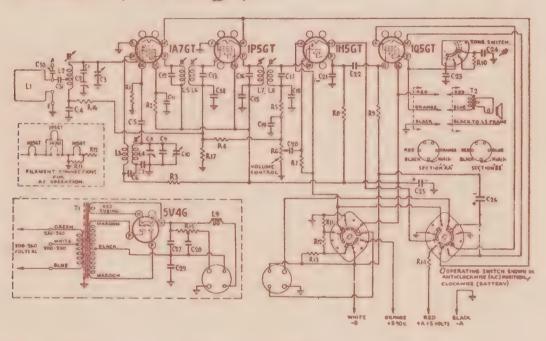
R.F. ALIGNMENT SETTINGS: 600 Kc/s. and 1500 Kc/s. (Osc. and Aer.).

INTERMEDIATE FREQUENCY: 455 Kc/s.

BATTERY COMPLEMENT: "A" Battery — 1.5 volts. "B" Battery — 90 volts.

BATTERY CURRENT CONSUMPTION: "A" Battery — .25 amp. "B" Battery — 9 M.A.

VALVE COMPLEMENT: (1) 1A7GT Frequency Converter. (2) 1P5GT I.F. Amplifier. (3) 1H5GT 2nd Det., AVC and A.F. Amp. (4) 1Q5GT Output Tetrode. LOUDSPEAKER (Permanent Magnet) — 5".



Code No.	RESISTORS.	Code No.	CONDENSERS.		
Ŕl	200,000 ohms 1/3W	CI	70 mmfd mica (N)		
R2	70,000 ohms 1W	C2	8-50 mmfd mica trimmer		
R3	40,006 ohms 1W	C3	Tuning Condenser		
R4	1.75 megohms 1/3W	C4	.05 mfd paper	CIS	110 mmfd mica (L)
R5	20,000 ohms 1/3W	C5	110 mmfd mica (L)	C19	110 mmfd mica (L)
R6	500,000 ohms Vol. Contr.	C6	.05 mfd paper	C20	.02 mfd paper
R7	2.3 megohms 1/3W.	C7	450 mmfd mica (Pad)	C21	200mmfd mica (J)
RJ	I megohin IW	C8	8-50 mmfd mica trimmer	C22	.02 mfd paper
R9	1.75 megohms 1/3W.	C9	9 mmfd mica (B)	C23	.0025 mfd paper
Rio	10,000 ohms 1/3W	CIO	Tuning Condenser	C24	.02 mfd paper
RH	26 ohms 3W	CH	.05 mfd paper	C25	20 mfd 200 P.V. Electro
RIZ	34 ohms 3W	CI2	70 mmfd mica (N)	C26	400 mfd, 12 P.V. Electro
RI3	600 ohms 1W	CI3	70 mmfd mica (N)	C27	20 mfd 200 P.V. Electro
R14	0.4 ohms wire wound	C14	.05 mfd paper	C28	20 mfd, 200 P.V. Electro
R15	1040 ohms wire wound	C15	.5 mfd paper	C29	400 mfd, 12 P.V. Electro
R16	100,000 ohms 1/3W	C16	70 mmfd mica (N)	C30	1000 mmfd mica
R17	500,000 ohms 1/3W	C17	70 mmfd mica (N)	C31	.05 mfd paper

HOTPOINT-BANDMASTER B74MB (Continued)

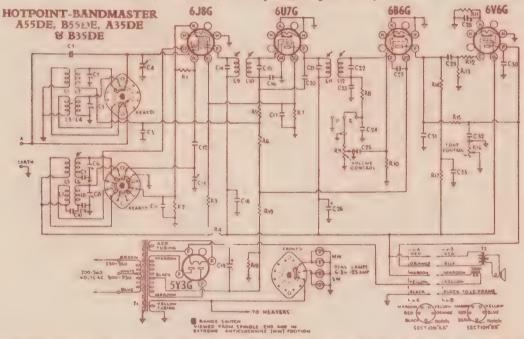
SOCKET VOLTAGES

V.	ALVE	CONTROL GRID TO CHASSIS	SCREEN GRID TO CHASSIS	PLATE TO CHASSIS VOLTS	ENATE CURRENT	FILAN	
		VOLTS	VOLTS		M.A.	BATTERY.	POWER
1A7GT	Converter	0	35	90	0.3	1.4	+ 1.4
	Oscillator	-	-	50	0.65	-	
1P6GT	I.F. Amp.	0 1	90	90	1.2	1.4	十 1.4
1H5GT	2nd Detector	0	100	60 +	•08	1.4	-1.4
1Q5GT	Output	-6 *	90	89	5.6	1.4	+ 2.8
5V4G	Rectifier	200/100V	110 MA.	- D.C.			
	and the state of t	A A		A			

Total "B" Battery Current 9 M.A . † Cannot be measured accurately with ordinary voltmeter. Measured with no signal input. Volume control at maximum clockwise.

HOTPOINT-BANDMASTER A55DE, B55DE, A35DE, B35DE & A35DG

5 Valve, Two Band, A.C. Operated Superheterodynes



NOTE:-Pick-up terminals, shown in the circuit diagram, are not provided in the Models B55DE & B35DE

TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. "Short Wave" - 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" - 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). "Short Wave" - 15M. (Osc. and Aer.)

'INTERMEDIATE FREQUENCY: 455 K.C. POWER CONSUMPTION: 75 watts.
VALVE COMPLEMENT: (1) 6J8G Freq.Converter. (2) 6U7G I.F. Amplifier.
(3) 6B6G 2nd Det., AVC and A.F. Amp. (4) 6V6G Output. (5) 5Y3G Rectifier.

LOUDSPEAKER: Models A55DE & B55DE - 7". Models A35DE, B35DE & A35DG - 12".

HOTPOINT-BANDMASTER A55DE, B55DE, A35DE, B35DE & A35DG (Continued)

Field Coil Resistance: 1500 ohms.
UNDISTORTED POWER OUTPUT — 4.2 watts.

CIRCUIT DATA FOR A55DE, B55DE, A35DE & B35DE

	CIRC	UIT	DATA FOR A55DE, B55DE,	A35DE	& B35DE
Code		R8	50,000 ohms 1/3W	C12	70 mmfd mica (N)
No.	COILS.	R9	500,000 ohms Vol. Cont.	C13	Tuning Condenser
L1, L2	Aerial Coil 1600-550 K.C.	R10	10 megohms 1W	C14	70 mmfd mica (N)
L3, L4	Aerial Coil 13.6-45M	RII	250 ohms 3W	C15	70 mmfd mica (N)
L5, L6	Oec. Coil 1600-550 K.C.	R12	50,000 ohms 1/3W	C16	.01 mfd paper
L7, L8	Osc. Coil 13.6-45M	R13	500,000 ohme 1/3W	C17	.1 mfd paper
L.9. L10	1st I.F. Transformer	R14	250,000 ohms 1W	C18	.1 mfd paper
L11, L12	2nd I.F. Transformer	R15	1.75 megohms 1W	C19	16 mfd, 500V. electrolytic
		R16	100,000 ohms Tone Cont.	C20	4 mmfd mica
		RI7	20,000 ohms 1W	C21	70 mmfd mica (N)
	TRANSFORMERS.	RIB	40 ohms 3W	C22	70 mmfd mica (N)
TI	Power Transformer 50-	R19	2.3 megohme 1/3W	C23	110 mmfd mtca (L)
Ti	Power Transformer 40C			C24	110 mmfd mica (L)
T2	Loudspeaker Transfor-	Code No.	CONDENSERS.	C25	.01 mfd paper
	mer (85, 91)	CI	4 mmfd mica	C26	16 mfd 350V. slating elec
T2	Loudspeaker Transfor- mer (195, 200)	C2	2.20 mmfd air trimmer		trolytic
		C3	2-20 mmfd air trimmer	C27	50 mmfd mica (D)
Code No.	RESISTORS.	C4	Tuning Condenser	C28	25 mfd 25V. electrolytic
R1	50,000 ohms 1/3W	C5	.05 mfd paper	C29	.02 mfd paper
R2	350 ohms 1/3W	C6	11-29 mmfd air trimmer	C30	.0025 mfd paper (195, 200) .015 mfd paper (85, 91)
R3	8000 ohms 1W	C7	440 mmfd mica (padder)	C31	200 mmfd mica (J)
R4	6000 ohms 2W	C8	2-10 mmfd air trimmer	C32	.1 mfd paper
R5	100,000 ohms 1/3W	C9	4000 mmfd mica (padder,	C33	.5 mfd paper
R6	1.75 megohms 1/3W	CIO	.05 mfd paper		
R7	20,000 ohms IW	C11	.05 mfd paper		
		\$20-1	AT THE TOTAL	CH CH CH	RIS TC96 A CONTROL RIS T1 AND BUE BUE BUE CONTROL TALON VALOR VALOR
	HOTPOINT-BANDMAS A35DG	TER	YELOM YO HEAT DIES	1	A Land Man o o baue
				-	The state of the s

Condenser C1 is incorrectly shown. It should be connected between the aerial terminal and the control grid of the 6JSG, as in the Circuit Diagram overlant.

HOTPOINT BANDMASTER A35DG (Continued)

	MOLLOIMI DV	1 1771	MILEO I EXC 213350 (COME		
Code No.	COILS.	R9	50,000 ohms 1/3W	C10	4000 mmfd mica (padder)
L1, L2	Aerial Coil 1600-550 K.C.	R10	500,000 ohms Vol. Cont.	CH	.05 mfd paper
1.3, L4	Aerial Coil 13.6-45M	RH	10 megohms 1W	C12	70 mmfd mica (N)
L5. L6	Osc. Coil 1600-550 K.C.	R12	250 ohma 3W	C13	Tuning Condenser
		R13	50,000 ohms 1/3W	C14	70 mmfd mica (N)
L7, L8	Osc. Coil 13.6-45M	R14	500,000 ohma 1/3W	C15	70 mmfd mica (N)
L9, L10	.lst l.F. Transformer	R15	250,000 ohms 1W	C16	4 mmfd mica
L11, L12	2nd 1.F. Transformer	R16		C17	.01 mfd paper
	,	R17		C18	.l mfd paper
	·	RIS	***************************************	CI9	16 mfd 500V. electro.
	TRANSFORMERS.		, and the state of	C20	
TI	Power Transformer 50-		40 ohma 3W	C21	70 mmfd mica (N)
	60C	R20	50,000 ohms 1/3W		70 mmfd mica (N)
TI	Power Transformer 40C	R21	20,000 ohms 1/3**	C22	110 mmfd mica (L)
T2	Loudspeaker Transfor-		•	C23	110 mmfd mica (L)
	65006	Code No.			.01 mfd paper
Code				C25	50 mmfd mica (D)
No.	RESISTORS.	CI	4 mmfd mica	C26	16 mfd 350V. Reg. Electro.
RI	350 ohms 1/3W	C2	2-20 mmfd air trimmer	C27	.02 mfd paper
R2	50,000 ohms 1/3W	C3	2-20 mmfd air trimmer	C28	25 mfd 25V. electrolytic
R3	20,000 ohms 1W	C4	Tuning Condenser	C29	.0025 mfd paper
R4	8000 ohms 1W	C5	.05 mfd paper	C30	.1 mfd paper
R5	6000 ohms 2W	C6	11-29 mmfd air trimmer	C31	.5 mfd paper
R6	100,000 ohms 1/3W	Ç7	.05 mfd paper	C32	200 mmfd mica (J)
R7 ·	1.75 megohms 1/3W	C8	2-10 mmfd air trimmer	C33	.1 mfd paper
R8	2.3 megohme 1/3W	Ç9	440 mmfd mica (padder)	C34	.01 mfd paper

SOCKET VOLTAGES.

VALVE		Bias Volts	Chassis		Plate Current M.A.	Heater Volts
6J8G Converter M.W	<i>'</i>	-3*	95	255	1.3	6.3
S.W	/	-3	95-	255	1.3	-
Oscillator M.V	/	-	_	160	5.0	-
S.V	/	-		160	5.0	****
6U7G I.F. Amplifier M.	W	-3*	95	255	8.0	6.3
	.S.W.	-3*	95	255	8.0	-
6B6G 2nd Detector		0	_	125*	U.52	6.3
6V6G Output		-12.5 ^a	255	242	44.0	6.3
5Y3G Rectifier 800/4	lov OC	ts, 75	M.A. '	Total c	urrent,	5.0.

*Cannot be measured with ordinary voltmeter.

Measured at 240 volts, A.C. supply. No signal input. Volume Control at maximum.

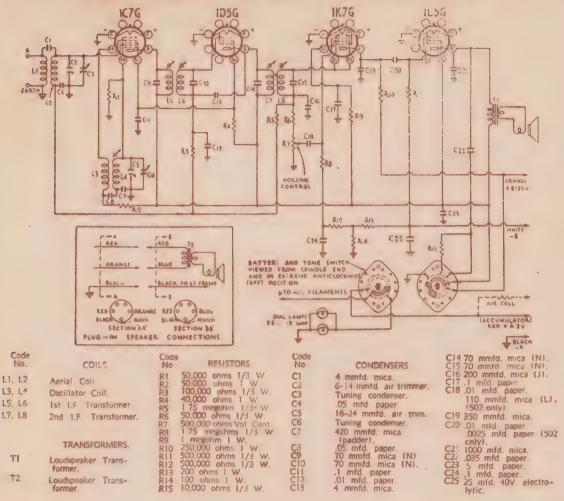
HOTPOINT-BANDMASTER A64MB & A44MB

TUNING RANGE: 1600-550 K.C. R.F. ALIGNMENT SETTINGS—600 K.C. (Osc.) INTERMEDIATE FREQ.: 455 K.C. 1500 K.C. (Osc. & Aer.) INTERMEDIATE FREQ.: 455 K.C. 1500 K.C. (Osc. & Aer.) CURRENT CONSUMPTION—"A" Battery at 2 volts—0.54 amp. "B" Battery at 135 volts-14 M.A.

REPLACEMENT FUSE—3/8 amp.
VALVE COMPLEMENT—1C7G Converter. 1D5G I.F. Amplifier. 1K7G 2nd Det., A.V.C. and Audio Amplifier. 1L5G Output Pentode.

LOUDSPEAKER: (Permanent Magnet).
UNDISTORTED POWER OUTPUT—350 milliwatts.

HOTPOINT-BANDMASTER A64MB & A44MB (Continued)



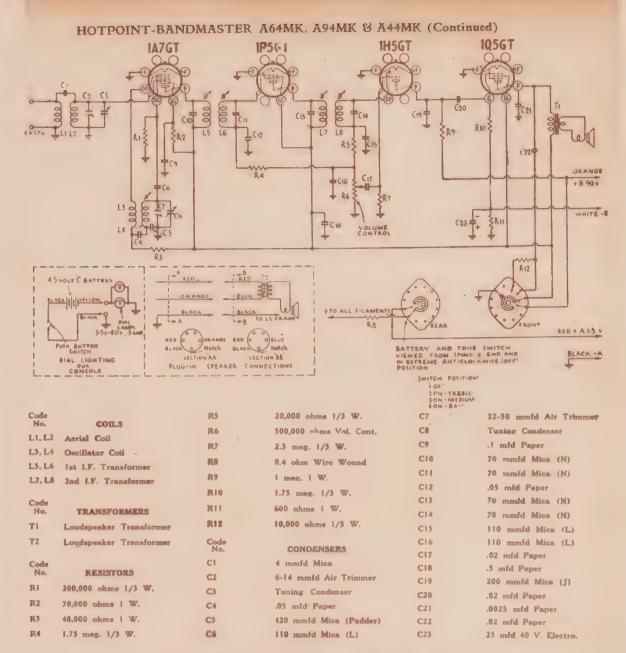
HOTPOINT-BANDMASTER A64MK, A94MK & A44MK

TUNING RANGE: 1600-550 K.C. R.F. ALIGN SETTINGS: 600 K.C. (L.F. Osc.), 1500 Kc/s. (H.F. Osc. and Aer.). INTER FREQ.: 455 Kc/s. CURRENT CONSUMPTION: "A" Battery at 1.5 volts — .25 amp. "B" Battery at .90 volts — 10 M.A. VALVE COMPLEMENT: 1A7GT Converter. 1P5GT I.F. Amp. 1H5GT 2nd Det. A.V.C. and A.F. Amplifier. 1Q5GT Output Tetrode. LOUDSPEAKER: (Permanent Magnet). UNDISTORTED POWER OUTPUT: 170 milliwatts.

AVIA	Bias Volts	Screen Grid to Chassis Volts	Plate to Chassis Volts	Plate Current M.A.	Filament Volts
IA7GT Converter	0	40	84	0.2	1.4
Oscillator		-	55	0.8	
195GT I.F. Amp	0	84	84	1.5	1.4
IH5GT 2nd Det	0	_	50*	.03	1.4
IQ5GT Output	-6	84	80	6.0	- 1.4

^{*} Cannot be measured with ordinary voltmeter.

Measured with no signal input and Volume Control in the maximum clockwise position.



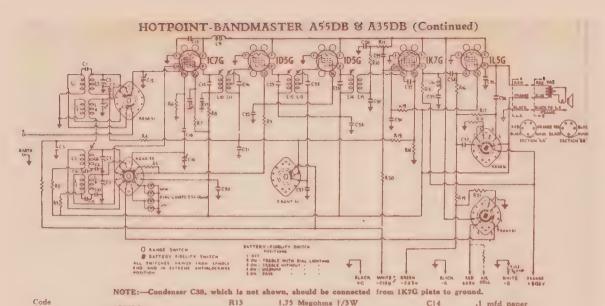
HOTPOINT-BANDMASTER A55DB & A35DB

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C. "Short Wave" — 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" — 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). "Short Wave" — 15M (Osc. and Aer.). INTER. FREQ.: 455 K.C. BATTERY COMPLEMENT: "A" Battery — 2 welt Accumulator. "B" Battery — 135 volt. "C" Battery — 4.5 volt. CURRENT CONSUMPTION: "A" Battery .60 amp. "B" Battery — 15-18 M.A.

VALVE COMPLEMENT: (1) 1C7G Freq. Converter. (2) 1D5G I.F. Amplifier. (3) I.F. Amp. (4) 1K7G 2nd Det., A.V.C. and A.F. Amp. (5) 1L5G Output Pentode.

REPLACEMENT FUSE: 3/8 amp.

LOUDSPEAKER: (Permanent Magnet). UNDISTORTED POWER OUTPUT: 350 milliwatts.



No.	COILS.	Kij	1.73 MeRoums 1/3 M	C14	, i mid paper
Li, L2	Aerial Coll 1600-550 K.C.	R14	2.3 Megohms 1/3W	C15	115 mmfd mica (A)
L3, L4	Aerial Coil 13.65-45M	R15	250,000 ohms IW	C16	130 mmfd mica (H)
L5, L6	Osc. Coil 1600-550 K.C.	RI6	390,000 ohme 1/3W	C17	.05 mfd paper
		R17	200,000 ohms 1/3W	CI8	70 mmfd mica (N)
1.7, L8	Osc. Coil 13.65-45M.	RIG	15,000 ohms 1/3W	C19	Tuning Condenser
L9	Filament Choke	RI9	100,000 ohms 1/3W	C28	8 mfd 450V. electrolytic
L10, L11	1st i.F. Transformer	R20	1.75 Megs. 1/3W	C21	.02 mfd paper
L12, L13	2nd I.F. Transformer	R21	400 ohms 1W	C22	.I mfd paper
L14, L15	3rd 1.F. Transformer			C23	115 mmfd mica (A)
L16, C33	I.F. Filter	No. Code	CONDENSERS.	C24	130 mmfd mica (H)
Code		CI	4 mmfd mica	C25 .	70 mmfd mica (N)
No.	RESISTORS.	C2	2-20 mmfd air trimmer	C26	.1 mfd paper
RI	100,000 ohms 1/3W	C3	.05 mfd paper	C27	.02 mfd paper
R2	40,000 ohms 1W	C4	8-26 mmfd air trimmer	C28	110 mmfd mica (L)
R3	400 ohms 1/3W	C5	.05 mfd paper	C29	.01 mfd paper
R4	100,000 ohms 1/3W	C6	440 mmfd mica (padder)	C30	110 mmfd mica (L)
R5	100,000 ohms 1W		***	C31	.1 mfd paper
R6	30,000 ohms 1/3W	C7	16-34 mmfd air trimmer		
R7	40,000 ohms 1W	C8	.05 mfd paper	C32	50 mmfd mica (D)
R8	300 ohms 1/3W	C9	2-10 mmfd air trimmer	C33	115 mmfd mica (A)
R9	100,000 ohms 1W	C10	4000 mmfd mica (padder)	C34	.05 mfd paper
R10		CH	05 mfd paper	C35	.0025 mfd paper
	20.000 ohms 1/3W			C36	.05 mfd paper
R11 7903	500,000 ohms Vol. Cont.	C12	Tuning Condenses	C37	2000 mmfd mica
R12	Megohm 1W	C13	.1 mfd paper .	C38	200 mmfd mica (j)
			ontrol Screen		

Control Screen Grid to Grid to Plate FilaSOCKET VOLTAGES. Chessis Chassis Current ment Volts Volts Volts M.A. Volts

		Yolts	Volts	Volts	M.A.	Volts
IC7G Converter	M.W	0	47	133	1.45	2.0
	S.W	0	52	133	2.15	-
Oscillator	M.W	-	-	62	1.5	-
	S.W		and realize	130	4.2	*****
1D5G 1.F. Amp.	M,W	0	23	135	0.8	2.0
	S.W	0 .	31	135	1.3	
IDSGI,F. Amp.	M.W	-1.5	23	135	0.24	2.0
	S.W	0	31	135	1.15	-
IK7G 2nd Detect	or	-1.5*	16*	35 *	0.18	2.0
ILSG Pentode		-4.5°	135	130	5.0	2.0

^{*} Cannot be measured accurately with ordinary voltmeter.

Measured with no signal input and volume control in maximum clockwise position.

HOTPOINT-BANDMASTER A55DV & A35DV

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C. "Short Wave" - 13.65-45M.

INTER. FREQ.: 455 K.C. BATTERY: 6 volt Accum.

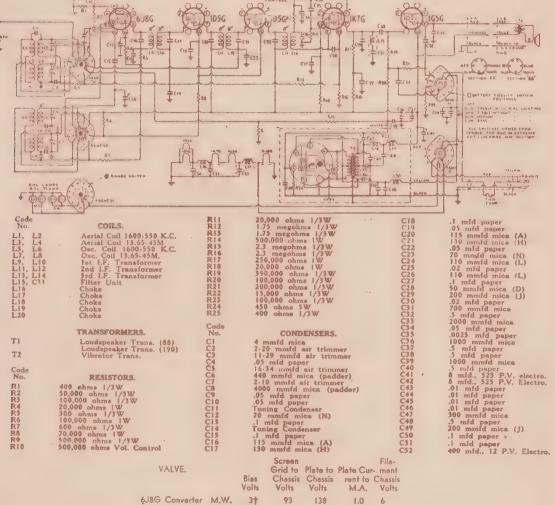
CURRENT CONSUMPTION: 1.4 amps.

REPLACEMENT FUSE: 3.0 amp.

TINGS: "Standard Medi-um Wave" — 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). S/W - 15M. (Osc. and Aer.).

R.F. ALIGNMENT SET-

VALVE COMPLEMENT: (1) 6J8G Freq. Converter. (2) 1D5G I.F. Amp. (3) 1D5G I.F. Amplifier. (4) 1K7G 2nd Det., A.V.C. and A.F. Amp. (5) 1G5G Output Pentode. VIBRATOR: Oak Type, 65UT. LOUDSPEAKER: (Permanent Magnet). UNDIS FORTED POWER OUTPUT: 550 milliwatts.



138 1.0 6 S.W. 3† 93 134 1.3 Oscillator 135 4.5 IDSG I.F. Amp. 1.2 2.0 1D5G I.F. Amp. -2‡* 140 0.7 2.0 35 30 2.0 0.35 9.8 135 -2‡ -13.5 IK7G 2nd Det. 4.0 1G5G Output M.W. 140 134 6.0 9.0

Measured with 1000 ohms per volt meter. † Cathode to chassis.

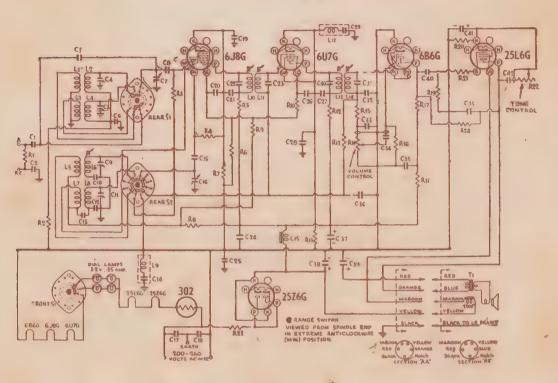
Measured with Volume Control meximum clockwise. No signal input.

[‡] Control grid to negative filament.

^{*} Cannot be measured with ordinary voltmeter.

HOTPOINT-BANDMASTER A55DU & A35DU

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C. "Short Wave" — 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" — 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). "Short Wave" — 15M (Osc. and Aer.). INTERMEDIATE FREQ.: 455 K.C. POWER CONSUMPTION: 90 watts. VALVE COMPLEMENT: (1) 6J8G Freq. Converter. (2) 6U7G I.F. Amp. (3) 6B6G-2nd Det., A.V.C. and A.F. Amp. (4) 25L6G Output. (5) 25A6G Rectifier. 302-Barretter. LOUDSPEAKER: 7" and 12". Field Coil Resistance 2500 ohms. UNDISTORTED POWER OUTPUT: 2.2 watts. MAINS FUSES: 3 amp.



		, o		
Code		R12 600 ohms 1/3W	C16	Tuning Condenser
No.	COILS.	R13 1.75 megohms 1/3W	C17	.1 mfd paper
		R14 500,000 ohms Vol. Cont.	Či8	
L1, L2	Aerial Coil 1600-550 K.C.	R15 50,000 ohms 1/3W	Ci9	.l mfd paper
L3, L4	Aerial Coil 13.65-45 M.	R16 10 megohms IW	C20	.02 mfd paper
L5. L6	Osc. Coil 1600-550 K.C.	R17 200.000 ohms IW	C21	.! mfd paper
L7, L8	Osc. Coil 13.65-45 M.	R18 50,000 ohms 1W	C22	.l mfd paper
L9. C14	Filter Unit	R19 390,000 ohms 1/3W	C23	70 mmfd mica (N)
1.10, L11	1st I.F. Transformer	R20 150 ohms 3W		70 mmfd mica (N)
L12, C29	Filter Unit	R21 50,000 ohms 1/3W	C24	.l mfd paper
L13, L14	2nd l.F. Transformer	R22 100,000 ohms Tone Cont.	C25	.01 mfd paper
L15	Filter Choke	R23 100 ohms 3W	C26	.1 mfd paper
	TRANSFORMERS	R24 12 megohma 1W	C27	.l mfd paper
		ree	C28	.01 mfd paper
Ti	Loudspeaker Trans-	Code	C29	3500 mmfd mica
	former (Mantel)	No. CONDENSERS.	C30	70 mmfd mica (N)
T1 -	Loudspeaker Trans-	Cl 500 mmfd mica	C31	
	former (Console)	C2 500 mmfd mica	C32	70 mmfd mica (N)
		C3 4 mmfd mica		110 mmfd mica (L)
Code	DESIGNADE	C4 2-20 mmfd air trimmer	C33	110 mmfd mica (L)
No.	RESISTORS.	C5 2-20 mmfd air trimmer	C34	.01 mfd paper
RI	100,000 ohms 1/3W	C6 .02 mfd paper	C35	.5 mfd paper
R2	400 ohms 1/3W	C7 Tuning Condenser	C3 5	.05 mfd paper
R3	500,000 ohms 1/3W	C8 350 mmfd mica	C37	8 mfd, 525 P.V. Electro
R4	50,000 ohms 1/3W	C9 11-29 mmfd air trimmer	C38	16 mid. 525 V.P. Electro
R5	600 ohms 1/3W	C10 440 mmfd mica (padder)	C39	8 mfd 525 P.V. Electro
R6	20,000 ohms IW	C11 2-10 mmfd air trimmer	C40	
R7	300 ohms 1/3W		C41	.01 mfd paper
R8	600t ohms 2W	in the second se		25 mfd 25 V. Electro
R9	8000 ohms IW	Ct3 .05 mfd paper	C42	.1 mfd paper
R10	600 ohms 1/3W	C14 3500 mmfd mica	C43	.0025 mfd paper-R189
RH	600 ohms 1/3W	C15 70 mmfd mica (N)		.035 mfd-R89

HOTPOINT-BANDMASTER A55DU & A35DU (Continued)

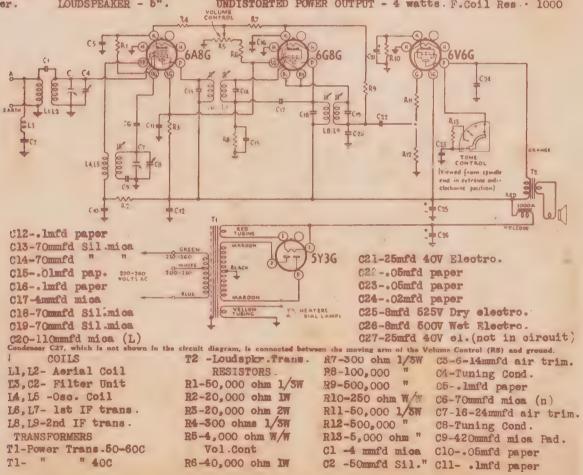
SOCKET VOLTAGES

VALVE 6J8G	Converter	CATHODE TO NEGATIVE VOLTS	SCREEN GRID TO NEGATIVE VOLTS	PLATE TO NEGATIVE VOLTS	PLATE CURRENT M.A.	HEATER VOLTS
0000	M.W.	. 2.5	100	205	1.0	6.3
	S.W.	2.5	100	205	1.5	-
	M.W.	40 .	40	150	4.0	_
	S.W.	-	-	150	4.0	***
607G	I.F. Amp.	3.5	80	205	4.5	6.3
6B6G	2nd Det.	0	-	120	0.35	6.3
25L6G	Output	7.0	105	85 *	38	25.0
25Z6G	Rectifier	230	-	235		25.0

Voltage across loudspeaker field - 120 volts. # Cannot be measured with ordinary voltmeter. Measured at 240 volts D.C. No signal. All controls maximum clockwise.

HOTPOINT-BANDMASTER B64ME & C64ME

TUNING RANGE: 1600-550 Kc/s. R.F. ALIGNMENT SETTINGS: 600 Kc/s. (L.F. Csc.), 1500 Kc. (H.F. Osc. and Aer.) INTERMEDIATE FREQ.- 455 Kc/s. POWER CONSUMPTION - 60 watts. VALVE COMPLEMENT- 6A8G Converter. 6G8G I.F. Amp. and 2nd Det. 6V6G Output. 5Y3G Rectifier. IOUDSPEAKER - 5". UNDISTORTED POWER OUTPUT - 4 watts. F.Coil Res.: 1000



HOTPOINT-BANDMASTER B64ME & C64ME (Continued)

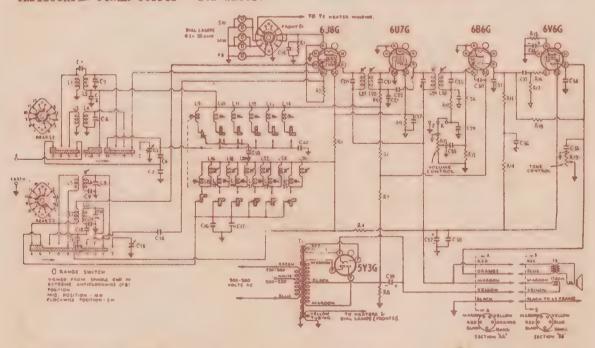
1 20

SOCKET VOLTAGES

VALVE		CATHODE TO CHASSIS VOLTS	SCREEN GRID TO CHASSIS VOLTS	PLATE TO CHASSIS VOLTS	PLATE CURRENT M.A.	FILAMENT VOLTS
6A8G	Converter	2.7	95	250	5.0	6.3
	Oscillator	60	-	160	4.0	de de
6G8G	I.F. Amp.					
	2nd Det.	2.5	96	250	7.0	6.3
6V6G	Output	11.0	250	230	40	6.3
5Y3G	Rectifier	640/320 Vo	lts, 60 M.A. 1	otal Current 5.0)	
			60 volts. N	leasured at 240 v	olts A.C.	Supply

HOTPOINT-BANDMASTER A35DA

TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. "Short Wave" - 13.65-45 M.
R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" - 600 K.C. (Osc.), 1500 K.C. (Osc.)
and Aer.) "Short Wave" - 15 M. (Osc. and Aer.) INTERMEDIATE FREQ.: 455 K.C.
POWER CONSUMPTION: 75 watts. VALVE COMPLEMENT - (1) 6J8G Freq.Converter.
(2) 6U7G I.F. Amp. (3) 6B6G 2nd Det. AVC and A.F. Amp. (4) 6V6G Output. (5) 5Y3G Rectifier. LOUDSPEAKER: 12" Field Coil Resistance - 1500 chms.
UNDISTORTED POWER OUTPUT - 4.2 watts.



NOTE: Condenser C) is incorrectly shown, and should be connected from Aerial to Control Grid 6]8G. Push button circuits, containing coils L9, L10, L11, cover a range from 550—1000 K.C.

The remaining three circuits cover a range from 880—1600 K.C.

R1-350 onm 1/3W	R9 -20,000 ohm lW	R17-500,000 ohm 1/3W	C4 -2-20mmfd air
R2-50,000 ohm 1/3W	R10-50,000 onm 1/3W	R13-1.75 meg. IW	trimmer
R3-8000 ohm IV	R11-500,000 ohm V.C.	R19-100,000 ohm T.C	C6- 260mmfd mioa
R4-6000 ohm 2W	R12-10 meg. 1W	Cl -4 mmfd mica	C7- 2000 mmfd mica
R5-100,000 ohm 1/3W	R13-250,000 ohm 1W	C2 -2-20mmfd air	C8 -11-29mmfd air
R6-1.75 meg.1/3W	R14-20,000 ohm lW	trimmer	trimmer
R7-2.3 meg.1/3W	R15-250 ohms 3W	C3O5mfd paper	C9- 440mmfd mioa
R8-40 ohm 3W	R16-50,000 ohm 1/3W	C5-Tuning Cond.	(Padder)

HOTPOINT-BANDMASTER A35DA (Continued)

2-10 mmfd air trimmer 4000 mmfd mica (Padder)	C21 C22	70 mmfd mica (N) 4 mmfd mica	C32 C33	.02 mfd paper 25 mfd., 25v electrolytic
.05 mfd paper	C23	.02 mfd paper. 70 mmfd mica (N).	C34	.0025 mfd paper
900 mmfd mica	C24 C25	70 mmrd mica (N). 70 mmrd mica (N)	C36	.5 mfd paper
Tuning Condenser 200 mmfd temp. comp.	C26 C27	110 mmfd mica (L)	C37	16 mfd, 350 P.V. Regulating Electro.
32.50 mmfd air trimmer	C28	.01 mfd paper	C38	.1 mfd paper
43 mmfd mica (X) .05 mfd paper	C29 /	110 mmfd mica (L) 50 mmfd mica (D)	C39 C40	16 mfd, 500 V. Electro. 9 mmfd mica (B)
70 mmfd Mica (N)	C31	200 mmfd mica (J)	0.10	

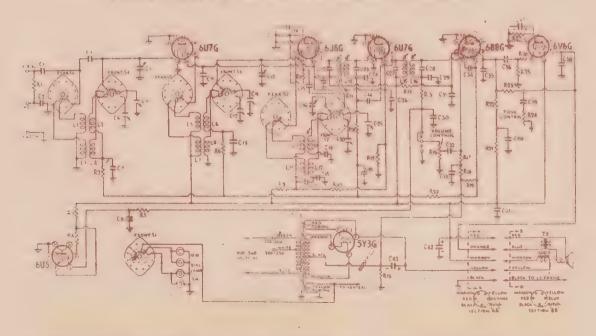
SOCKET VOLTAGES.

VALVE	Bias	Screen Grid to Chassis Volts.	Chassis	Current		eater /olts.
6J8G Converter M.W.	-3#	95	255	1.3		6.3
s.w.	-3	95	255	1.3		-
Oscillator M.W.			160	5.0		-
S.W.		_	160	5.0		
6U7G I.F. Amp. M.W.	-3*	95	255	8.0		6.3
s.w.	-3*	95	255	8.0		-
6B6G 2nd Detector	0	street	125	0.52	J	633
6V6G Output	12.5	255	242	44.0		6.3
5Y3G Rectifier · 800/	400 v	olts, 75M.A	. Total	current .		5.0

^{*} Cannot be measured with ordinary voltmeter.

Measured at 240 volts, A.C. supply. No signal input. Volume Control at maximum.

HOTPOINT-BANDMASTER A26DE



HOTPOINT-BANDMASTER A26DE (Continued)

TUNING RANGES: "Standard Medium Wave" 1600-550 K.C. "Short Wave" 13.6-45 M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" 600 Ko/s (Oso.), 1500 Ko/s. (Oso., R.F. and Aer.- "Short Wave" 15 M. (Oso., R.F. and Aer.).

INTERMEDIATE FREQ.: 455 Ko/s. POWER CONSUMPTION - 80 watts.

VALVE COMPLEMENT: (1) 6U7G R.F. Amp. (2) 6J8G Freq. Converter. (3) 6U7G

I.F. Amp. (4) 6B8G 2nd Det. AVC and A.F. Amp. (5) 6V6G Output. (6) 5Y3G
Rectifier. 6U5 Visual Tuning Indicator. LOUDSPEAKER: 12". Field Coil Resistance: 1500 ohms. UNDISTORTED POWER OUTPUT - 4.2 watts.

```
R1 -100,000 ohms 1/3W
                        R26-50,000 ohm 1/3W
                                                  C21- .lmfd paper
R2 -100,000 "
                        R27-250 ohm 3W
                                                  C22- 70mmfd mica (N)
R3 -20,000 ohm IW
                                                  C23- 70mmfd mica (N)
                        R28-100,000 ohm 1/3W.
R4 - 1 megohm IW
                                                  C24- .Olmfd paper
R5 -1.75 meg. 1/3W
                        Cl -500mmfd mica
                                                  C25- 11-29mmfd air trim.
                                                  C26- .lmfd paper
R6 -100,000 ohm "
                        C2 -500 mmfd mica
R7 -300 ohms 1/3W
                                                  C27- 70mmfd mica (N)
                         C3-4 mmfd mica
                                                  C28- " "
R8 -30,000 ohm 1/3W
                        C4 -Tuning Cond.
                                                  C29-110mmfd mica (L)
                        C5 -2-20 mmfd air
R9 -6000 ohm 2W
                                                  CSO- " "
                            trimmer
R10-8000 ohm IW
                                                  C31-.lmrd paper
R11-300 ohm 1/3W
                        C6 -2-20mmfd air t
R12-20,000 ohm 1W
                        C7 -. 05mfd paper
                                                  C32-.Olmfd paper
R13-33 ohm 3W
                        C8 -. O5mfd paper
                                                  C33-.lmfd paper
                        C9 -. lmfd paper
                                                  C34-50mmfd mica (D)
R14- 1.5 meg. 1W
                                                  C35-200mmfd mica (J)
R15-50,000 ohm 1/3W
                        Clo-Tuning Cond.
R16-500.000 ohm V.C.
                        Cl1-2-20mmfd air t.
                                                  C36-.O2mfd paper
                         C12- """
                                                  C37-25mfd 25V elec.
R17-1.75 meg. 1/3W
R18-500,000 ohm 1/3W
                                                  C38-.0025mfd paper
                        Cl3-.05 mfd paper
                        Cl4-. Imfd paper
R19-2.3 meg. 1/3W
                                                  C39-.lmfd paper
                        C15-70mmfd mioa (N)
                                                  C40-.5mfd paper
R20- 1.75 meg. 1/3W
R21-50,000 ohm 1W
                        C16-Tuning Cond.
                                                  C41-.5mfd paper
                                                  C42-16mfd 350V reg.el.
R22-200,000 ohm lW
                        C17-.05mfd paper
                                                  C43-16mfd 500V elec.
R23-3 megohm 1W
                        C18-3500mmfd mica (Pad)
                        C19-440mmfd mioa (Pad)
                                                  C44-4mmfd mica
R24-100.000 ohm T.C
                                                  C45- .O5mfd paper
R25-500.000 ohm 1/3W
                        C20-2-10mmfd air trim.
```

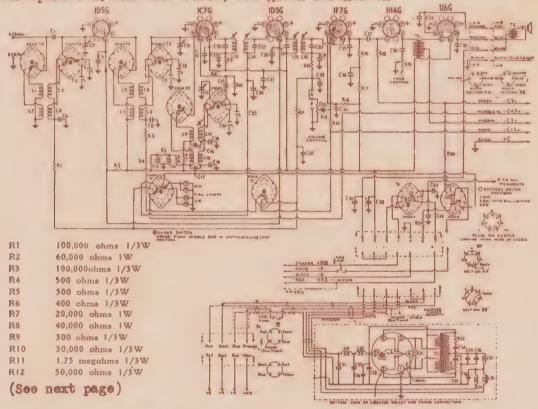
VALVE.	*	CONTROL	CATHODE	SCREEN	PLATE		
		GRID TO	TO	GRID TO	TO	PLATE	
		CHASSIS	CHASSIS	CHASSIS	CHASSIS	CURRENT	HEATER
		VOLTS .	VOLTS	VOLTS	VOLTS	M.A.	VOLTS
6U7G R.F.Amp.	M.W.	-2.7 *	0	90	255	7.5	6.3
	S.W.	-2.7 *	0	90	255	7.5	-
6J8G Convert.	M.W.	-2.7 4	2.5	90	255	0.6	6.3
	S.W.	-	2.8	90	255	1.0	-
Oscill.	M.W.	-	-	-	1.50	7.0	•
	S.W.	F .	-	_	150	7.0	-
6U7G I.F.Amp.	M.W.	-2.7 A	0	90	255	7.5	6.3
	S.W.	-2.7 4	0	90	255	7.5	
6B8G Detect.		-2.7*	0	80 \$	125*	0.5	6.3
6V6G Output		•0	12.5	255	245	44.0	6.3
5Y3G Reot.		700/350V		80 M.A. t	total dra	in	5.0

* Cannot be measured with ordinary volmeter. Measured with receiver consected to 240 volts A.C. supply. Volume Control at maximum. No signal in-

HOTPOINT-BANDMASTER A26DB & A26DV

6 Valve, Two Band, Battery Operated Superheterodyne

TUNING RANGES: "Standard Medium Wave" 1600-550 K.C. "Short Wave" 13.6-45 M.
R.F. ALIGNMENT SETTINGS - "Standard Medium Wave" 600 Ke/s. (Osc.), 1500 Kcs.
(Osc., RF and Aer.) "Short Wave" 15 M. (Osc., R.F. and Aer.)
INTERMEDIATE FREQ.: 455 Ko/s. CURRENT CONSUMPTION - "A" Battery at 2 volt0.60 amp. (Battery operation). "A" Battery at 6 volts - 1.2 amp. (Vibrator operation).
"B" Battery at 135 volts - 17-20 M.A. (Battery operation).
REPLACEMENT FUSE: 3/6 Amp. (Battery operation). 5 amp. (Vibrator operation).
VALVE COMPLEMENT - (1) 1D5G R.F. Amp. (2) 1C7G Freq. Converter. (3) 1D5G
I.F. Amp. (4) 1F7G 2nd Det. AVC and A.F. Amp. (5) 1H4G Audio Amplifier
(6) 1J6G Class "B" Output. LOUDSPEAKER (Permanent Magnet) 12".
This Receiver may be operated using batteries entirely, or from a Vibrator Power Unit. Instructions for converting the Receiver from Battery to Vibrator operation, and vice-versa, are given further on.



conversion from "B" Battery to Vibrator Power Unit operation.

(a) Disconnect the battery cable from the chassis and remove the "A" & "B" batteries. (b) Place the Vibrator Power Unit in the lower compartment of the cabinet, where holes are provided for mounting and mount using the screws supplied. (c) Connect the plug on the Vibrator Power Unit cable to the chassis - see diagram. Connect the braiding on the cable to the chassis, using the screw provided for the purpose at the rear right-hand corner. (d) Connect the short cable to the 6 volt accumulator as shown in diagram. Place the accumulator in the lower compartment of the cabinet or on the floor, and connect it to the Vibrator Power Unit cable by joining the plug and socket

HOTPOINT-BANDMASTER A26DB & A26DV (Continued)

CONVERSION FROM VIBRATOR POWER UNIT TO "B" BATTERY OPERATION.

- (a) Disconnect the Vibrator Power Unit cable from the chassis (c) Connect the battery cable to the plug on the chassis, not forand disconnect and remove the accumulator.
- (b) Remove the Vib. for Power Unit from the cabinet.

.05 mfd paper

.05 mfd paper

8 mfd 500V. electrolytic

8 mfd 500V. electrolytic

2 20 mmfd air trimmer 2-20 mmfd air trimmer

3500 mmfd paper (Pad)

70 mmfd mica (N)

70 mmfd mica (N)

70 mmfd mica (N)

2-10 mmfd air trimmer

11.29 mmfd air trimmer

.1 mfd paper

.02 mfd paper

5 mfd papër

.I mfd paper

.02 mfd paper

.I mfd paper

70 mmfd mica (N)

70 mmfd mica (N)

110 mmfd mica (L)

110 mmfd mica (L)

200 mmfd mica (J)

Tuning Condenser

Tuning Condenser

.1 mfd paper

.05 mfd paper

.05 mfd paper 440 mmfd paper (Pad)

Deleted

C6

C7

C8

C9

C18

C11

C12

C13

C14

C15

C16

C17

C18

C19 C20

C21

C22

C23

C24

C25

C26

C27

C28

C29

C30

C3 I

C32

C33

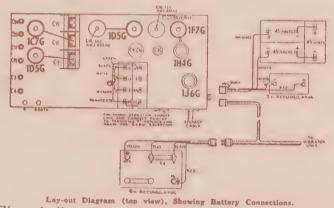
C34

C35

getting to insert the tip attached to the cable in the receptacle adjacent to the plug, and connect the batteries according

R13	500,000 ohma Vol. Control		Control	Screen			
R14	1.75 megohms 1/3W		Grid to	Grid to	Plate to	Plate	
R15	1 megohm IW	VALVE.				Current	Filament
. R16	200,000 ohms 1W		Volts	Volts	Volts	M.A.	Volts
R17	50,000 ohms 1W	IDSG R.F. Amp.	M.W. 0	45	135	2.5	2.0
RI8	500,000 ohms 1/3W		S.W. 0	45	135	2.5	
R19	100,000 ohms Tone Cont.	IC7G Converter	M.W. 0	45	130	3.1	2.0
R20	900 ohms IW		S.W1.5*	45	130	1.4	
R21	4.5 ohms Wire Wound	Oscillator			90	1.4	_
R51	400 chms 1/3W						
R52	100 ohms 1/3W	*	s.w. —		125	3.5	
R53	100 ohme 1/3W	ID5G I.F. Amp.	M.W4.5	45	135	0.6	2.0
	•		S.W. 0	45	135	2.0	-
Cod- No.	CONDENSERS.	IF7G Detector	-1.5*	35*	65*	0.3	2.0
CI	4 mmfd mica	1H4G Audio	.94	*****	135	2.0	2.0
C2	Tuning Condenser	IJ6G Output	-3	_	135	4.0	` 2.0
C3	2-20 mmfd air trimmer	# Connet he	measured with	andiana	ltmata		
C4	2-20 mmfd air trimmer						
C5	.1 mfd paper	Measured	with no signal	input.	Volume	Control	at

maximum.



.5 mfd paper C51 .25 mfd paper .05 mfd paper .25 mfd paper C52 .02 mfd paper

C53 .5 mfd paper .005 mfd paper C54 .015 mfd paper .005 mfd paper .01 mfd paper 450 mmfd mica C56 8 mfd. 525 P.V. 8 mfd. 525V. electrolytic C57 .015 mfd paper .5 mfd paper C58 .01 mfd paper 450 mmfd mica 300 mmfd. .02 mfd paper

HOTPOINT-BANDMASTER A28QE, A18QA, A18QGA & A18QG

C36

C37

C38

C39

C40

C41

C43

C44

C45

TUNING RANGES: "Standard Medium Wave" (a) 1600-550 Kc/s. "Short Wave" (b) 27-52M. "Short Wave" (c) 18-27M. "Short Wave" (d) 13.5-18M.

R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" (a) 600 Kc/s. (Osc.) 1500 Kc/s. "Short Wave" (b) 28M. (Osc., R.F. and Aer.). "Short Wave" (c) 26M. (Osc., R.F. and Aer.). 18.7M. (Osc., R.F. and Aer.). "Short Wave" (d) 17.7M. (Osc., R.F. and Aer.). 14.0M. (Osc., R.F. and Aer.). INTERMEDIATE FREQ.: 455Kc/s.

POWER CONSUMPTION (Tuning Motor Inoperative): 95 watts. LOUDSPEAKER: 12".

UNDISTORTED POWER OUTPUT: 8 watts.

HOTPOINT-BANDMASTER A28QE, A18QA, A18QG & A18QGA (Continued)

VALVE COMPLEMENT: (1) 6U7G R.F. Amp. (2) 6J8G Freq. Converter. (3) 6U7G I.F. Amplifier. (4) 6B8G Detector, A.V.C. and A.F. Amp. (5) 6B8G Phase Inverter and *Muting. (6) 6V6G — Output. (7) 6V6G Output. (8) 5V4G Rectifier. 6U5 Visual Tuning Indicator.

*This function is not performed by valve in Models A28QE and A18QG. AUTOMATIC TUNING ADJUSTMENT LAMP: 6.3 volt. .25 amp.

These models are of two types, Console (Models A 28QE and A 18QA), and Radio Gramophone Combination (Models A 18QG and A 18QGA). Identical chassis, incorporating automatic tuning are used in all but the Models A 28QE and A 18QG, which are manually tuned.

The Models A18QG and A18QGA are both available with either a manually operated gramophone motor or one of the Automatic Record-Changer Type.

Life used in the Model 314 is an Automatic Record Changer Type.

NOTE: For information re Adjustments for Automatic Tuning, and Automatic Tuning Mechanism, see Hotpoint-Bandmaster 289DE in previous volume of this book

OCKET	VOLTAG		Control C Grid to	athode to	Screen Grid to	Plato to	Plate	
VA	LVE.			Chassis Volts.	Chassis	Chassis Volts.	Current M.A.	Heater Volts.
6U7G	R.F. Amp.	M.W. S.W.		0	100	260 260	8	6.3
6J8G	Converter	M.W. S.W.	-3.0°	2.8	100	260 260	0.5	6.3
	Oscillator	M.W. S.W.	_		_	130	7 7	
6U7G	I.F. Amp.	M.W. S.W.	-3.0*	3.8	100	260 260	4 8	6.3
688G	Detector Phase Inve		-3.0* -3.0*	0	35* 35*	125*	0.5 0.5	6.3
6V6G	Output Output	гтөг	0	13.5	260	250	38	6.3
	Rectifier		650/325	13.5 V.,	260 120 M.A.	250 Total Cui	38 rrant	6.3 5.0

Tuning Motor Voltage (no load), 27 volts A.C. Tuning Motor Voltage (on load), 24 volts A.C. Voltage across loudspeaker field -- 75 volts

Measured at 240 volts A.C. supply. No signal input. Controls in maximum clockwise position excepting Range Switch, which is set as required.

*Cannot be measured with ordinary voltmeter.

HOTPOINT-BANDMASTER A28QE & A18QA — GRAMOPHONE MOTOR SERVICE

AUTOMATIC STOP ADJUSTMENT.

The Patent Stop and Switch is fully automatic.

As the needle travels towards the centre of the Record, the Pick-up Arm moves the Friction Plate, which, through the friction pad and spring, carries with it the Main Lever.

This Main Lever moves in towards the Turntable Spindle on which is mounted the Striker, which gently wipes against the Lever at every revolution, thus tapping back the Main Lever.

The "tapping back" process continues until the needle reaches the "run-in" groove in the centre of the record. The lever

is now moved torward into the path of the striker, which strikes the side of the lever and trips the Stop mechanism.

If Stop tails to operate at finish of record, there is probably insufficient friction. This may be rectified by turning the friction screw in a clockwise direction.

When Stop operates early, i.e., before needle reaches the end of the record, the trouble is due to excessive friction.

As this adjustment is very sensitive, the screw should not be turned more than a quarter of a turn at a time. Excessive friction may cause a knocking sound to be heard in the loudspeaker and undue wear on records

HOTPOINT-BANDMASTER A180G & A180GA -- AUTOMATIC RECORD-CHANGER

THE AUTOMATIC TRIP. The automatic trip plays an important part in the operation of the record changer, upon the certainty of the automatic trip coming into action depends the whole operation of the record changer.

The auto trip mechanism will operate on all records having a "run off" groove, either eccentric or spiral.

The auto trip will not operate on records without a "run off" groove, and if trouble is experienced with the pick-up remaining at the end of a record and so preventing the changer from operating, it is advisable to see that the record has a "run off" groove before attempting to make any adjustment to the mechanism.

OPERATION OF AUTOMATIC TRIP.

The method of operation is as follows:—The Trip Lever being connected to the Pick-up Arm through a series of levers, is moved forward towards the Main Spindle, a distance proportional to the advance made by the Pick-up. The Striker is fitted upon the main spindle in order to push back the Trip Lever and prevent the Auto Trip from operating whilst the record is being played. When the Pick-up reaches the end of the playing grooves and is moved into the "eccentric" or "run-off" groove, the movement

transmitted to the Trip Lever is too much to allow of its being pushed back by the 'triker, which strikes the metal Trip Lever itself, and by tripping it, operates the changing mechanism.

STRIKER ADJUSTMENT.

The correct (and silent) functioning of the Trip mechanism depends on the rubber bush on the Trip Lever. When this bush becomes bedly worn, a tapping sound will become apparent, and the Trip may operate before the end of the record. This fault may be rectified by turning the rubber bush round, in order to present a new surface to the Striker.

FRICTION ADJUSTMENT.

The Friction Adjusting Screw is readily accessible when the Turntable is removed.

If the Changer fails to operate at the end of a record, the record spindle should be removed, the Turntable lifted off, and the friction screw adjusted.

Before adjusting this screw, it is advisable to make sure that the operating and trip lover is clear of the base plate, and not setting up additional friction by rubbing the plate.

HOTPOINT-BANDMASTER A280E, A18QA. A18QG & A18QGA (Continued)

To adjust the friction, give the friction adjusting screw a small turn in an anti-clockwise direction to increase the friction.

If the Changer trips before the Pick-up has reached the end of the playing grooves, or if a bumping noise is heard through the amplifier, the Screw should be turned the opposite way, i.e., in a clockwise direction, to decrease the friction. As this adjustment is very sensitive, the screw should be turned not more than a quarter of a turn at a time.

RECORDS.

If an occasional slowing-up is noticed in the reproduction, the trouble is most likely due to the record slipping through being concave or warped. If slip occurs on a new record, examine the centre hole for burrs left in record manufacture. Carefully remove these burrs with a penkniife.

PICK-UP ARM ADJUSTMENT.

The Pick-up Arm has been finely adjusted so that the needle comes on to the 10in, record on 95 in, diameter circle, and comes on to the 12in, record on 115 in, diameter circle. These dimensions have been arrived at after checking over a very wide selection of records of various makes.

There may be a few records where the playing groove starts further away from the centre, and in these exceptional cases the needle would come on to the record a few grooves in instead of on the plain part. If the Changer was set for these exceptional records it would mean that the Pick-up would not be lowered on to the edge of records of normal size.

Should the dropping position of the needle require adjustment, a screw, which is accessible through a hole in the unit-plate, should be turned either to left or right, according to requirements—a quarter of a turn in either direction will give the maximum adjustment obtainable.

The adjustment should afterwards be checked by running the Changer and noting the dropping position.

When making any adjustments to the Pick-up Arm, it should on no account be forced into position, and if the turntable is turned by hand it should never be turned backwards.

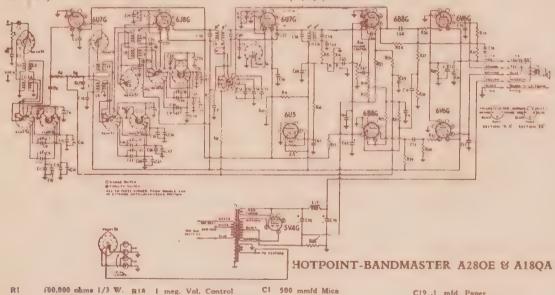
AUTO SWITCH

The Record Changer automatically stops after the last record has played, and this is achieved by means of the centre spindle.

The weight of a record on the centre spindle moves a lever, which interrupts the movement of the Switch Lever from the cam. so preventing the switch from operating.

When the record is removed from the centre spindle, the spindle lifts and allows the lever to move so that it does not interrupt the switch lever, thereby allowing the switch to operate.

If trouble is experienced with the Auto-Switch not operating at the end of the last record, see that all the levers are free and that all the springs are fixed correctly. Also see that the centre spindle is free in the main spindle—it should move about one-eighth inch when pressed down and should rise the same amount when released. This test should be made when the Changer is in the playing position.

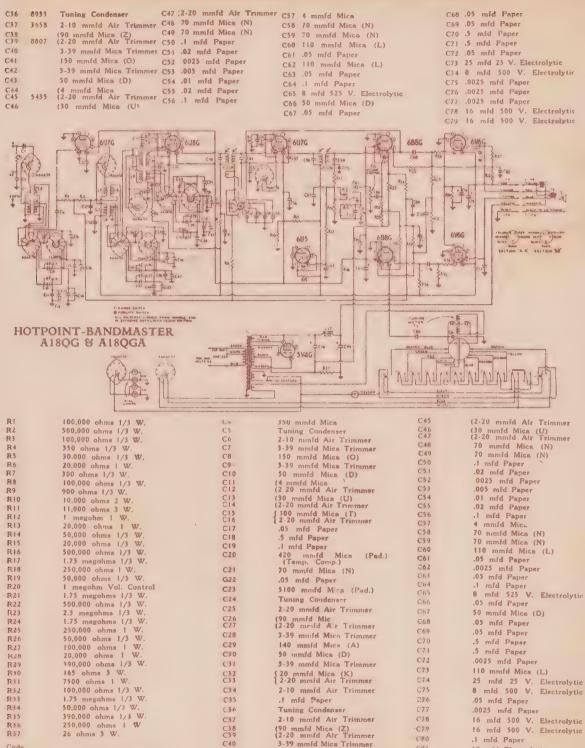


RI	100,000 ohms 1/3 W.	RIA	I meg. Vol. Control
R2	500,000 ohms 1/3 W.	R19	1.75 megohms 1/3 W.
R3	100,000 ohms 1/3 W.	R20	500,000 ohms 1/3 W.
R4	350 ohms 1/3 W.	R21	2.3 megohms 1/3 W.
R5	30,000 ohms 1/3 W.	R22	100,000 ohms 1/3 W.
R6	20,000 ohms ! W.	R23	1.75 megohms 1/3 W.
R7	300 ohms 1/3 W.	RZ4	250,000 ohms W.
Rs	100,000 ohma 1/3 W.	R25	1.75 megohma 1/3 W.
		R26	50,000 ohms 1/3 W.
R9	900 ohms 1/3 W.	R27	390,000 ohms 1/3 W.
RIO	10,000 ohms 2 W.	R28	7.500 ohme 1 W
RH	11,000 ohms 3 W.	R29	250,000 ohms 1 W.
R12	1 megohm I W.	R30	390,000 ohms 1/3 W.
R13	20,000 ohmu 1 W.	R31	50,000 ohms 1/3 W.
R14	1.75 meg. 1/3 W.	R32	165 ohms 3 W.
R15	0,000 ohms 1/3 W.	R33	100,000 ohms 1 W.
R16	500,000 ohms 1/3 W.	R34	20,000 ohms I W.
R17	250,000 ohms 1 W.	R35	26 ohms 3 W.

C2 500 mmfd Mica
C3 .1 mfd Paper
C4 350. mmfd Mica
C5 Tuning Condenses
C6 2.10 mmfd Air Trimmer
C7 3-39 mmfd Mica Trimmer
C8 150 mmfd Mica (O)
C9 3-39 mmfd Mica Trimmer
C10 50 mmfd Mica (D)
C11 (4 mmfd Mica C12 { 2-20 mmfd Air Trimmer
C13 30 mmfd Mica (U) C14 2-20 mmfd Air Trimmer
C15 { 100 mmfd Mica (T) C16 { 2.20 mmfd Air Trimmer
C17 .05 mfd Paper
Cl8 .5 mfd Paper

C19 .1 mfd Paper
C20 420 mmfd Mica (Pad.) (Temp Comp.)
C21 70 mmfd Mica (N)
C22 05 mfd Paper
C23 5100 mmfd Mica (Pad.)
C24 Tuning Condenser
C25 2-20 mmfd Air Trimmer
C26 90 mmfd Mica (Z) C27 2-20 mmfd Air Trimmer
C26 3-39 mmfd Mica Trimmer
C29 140 mmfd Mica (1A)
C30 50 mmfd Mica (D)
C31 3-39 mmfd Mica Trimmer
C32 (20 mmfd Mica (K) C33 (2-20 mmfd Air Trimmer
C34 2-10 mmfd Air Trimmer
C35 .1 mfd Paper

HOTPOINT-BANDMASTER A28OE & A18OA (Continued)



(4 mmfd Mica

C41

C42 C43

CONDENSERS.

500 mmfd Mica 500 mmfd Mica .1 mfd Paper

CI

150 mmfd Mica 3-39 mmfd Mica Trimmer 50 mmfd Mica (D)

(81

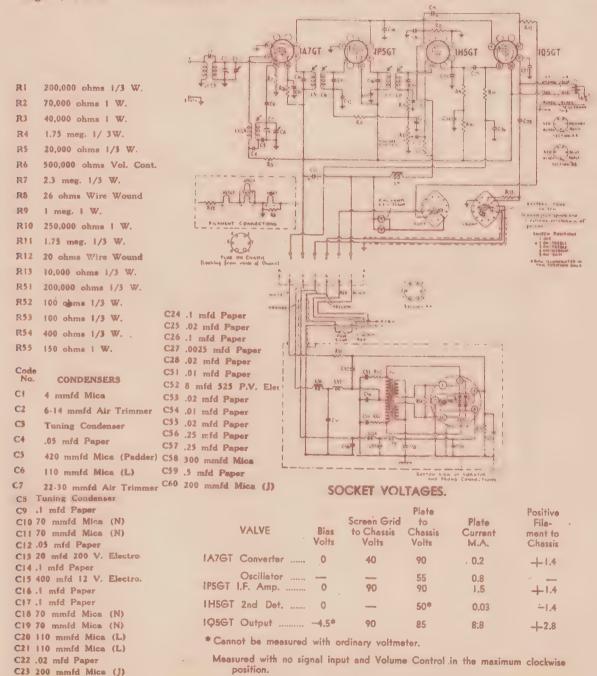
C82

60 mfd Electrolytic

.005 mfd Paper

HOTPOINT-BANDMASTER A44MV 4 Valve, One Band, Vibrator Operated Superheterodyne

TUNING RANGES: 1600-550 Kc/s. R.F. ALIGNMENT SETTINGS: 600 Kc/s. (L.F. Osc.) 1500 Kc/s. (H.F. Osc. and Aer.). INTERMEDIATE FREQ.: 455 Kc/s. BATTERY: 6v. Accum. CURRENT CONSUMPTION: 0.6 amp. (Dial Lamps (OFF). REPLACEMENT FUSE: 5 amp. VALVE COMPLEMENT: 1A7GT Converter. 1P5GT I.F. Amp. 1H5GT 2nd Det., A.V.C. and A.F. Amp. 1Q5GT Output Tetrode. VIBRATOR: Type 65UT (V5809) or 65UH (V2511). LOUDSPEAKER: (Permanent Magnet) 7 inch. UNDISTORTED POWER OUTPUT: 250 milliwatts.

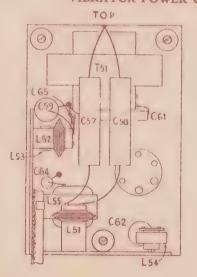


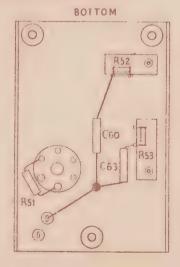
HOTPOINT-BANDMASTER C56SB, C56SB/V, B26SB & B26SB/V

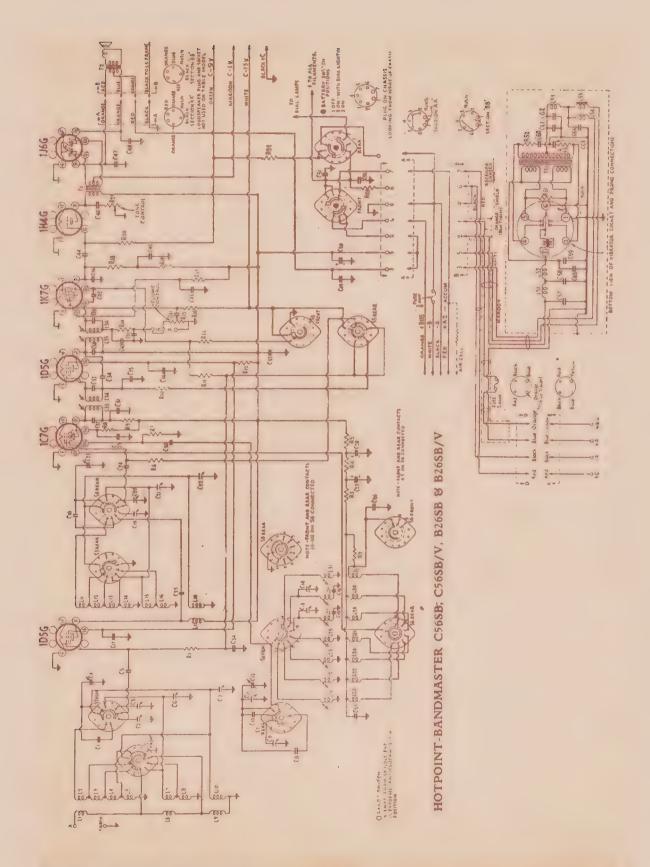
INTERMEDIATE FREQ.: 455 K.C. CURRENT CONSUMPTION: "A" Battery at 2 Volts (Battery Operation) - 0.66 amp. "B" Battery at 135 volts (Battery Operation) - 17-20 ma. "A" Battery at 6 volts (Vibrator Operation) - 1.2 amp VALVE COMPLEMENT: (1) 1D5G R.F. amp. (2) 1C7G Converter. (3) 1D5G - I.F. amp. (4) 1K7G 2nd det. A.V.C. and A.F. Amp. (5) 1H4G Audio Amp. (6) 1J6G Class "B" Output. LOUDSPEAKER: 7" and 12".

CIRCUIT CODE - Abbreviations - w ~ohms. W ~ Watt. Sil . - Silvered . C2 -5-50mmfd Mica C18-53mmfd Sil. R1 -1w 1/3W G41- .Olmfd pap. Trimmer mica C42-50mmerd mica R2 -30,000w lW C3 -5-50mmfd Mica C19&20-3-30mmfd R3 -500w 1/3W C43-.1 mfd paper C44- .O 5mfd paper Mica trim. R4 -500w 1/3W Trimmer C45- .5mfd paper C46-.035mfd paper 021&22-3-30mm fd R5 -500w 1/3W C4 -Tuning Cond. mica trim. R6 - 1meg . 1/3W C5 -200mmfd S11. C47-.005 mfd paper C23-Tun . Cond . R7 -50.000w 1/3W Mica C24-200mmfd Sil. C48-.005 mfd paper R8 -40,000w lW C6,&C7-5-50mmfd mias C49-450mmfd mica R9 -300w 1/3W Mica Trimmer C25-50mmfd 311. 050-8mfd 525V R10-100,000w 1/3W C8 -40mmfd Temp. mica slectro Compensated R11-1.75 meg.1/3W 026-.lmfd paper C9 -11-29nmfd C51-450mmfd mica R12-60,000w lW C27&28-8mfd C52-.5mfd paper R13-2.3 meg.1/3W air trimmer C53-.1 mfd paper 500V elec. Clo-490mmfd mica R14-50.000w 1/3W C29-.lmfd pap. C54- .05mfd paper Padder R15-500.000W V.C. C30-70mmfd Sil. Cll-2-lommfd air 055- 110mmfd mica R16-1.75 meg.1/3W mica trimmer C56- 200 mmfd R17-1 meg. 1W C31-.05mfd pap. C12-Tuning Cond. mica R18-200.000w 1W C32&33-70mm fd Cl3-2-20mmfd air C57-.25mfd paper R19-50,000w 1W Sil. mica trimmer C58-.25mfd paper R20-500.000w 1/3W C34-4mmfd mica C14-11-29mmfd C59-.5mfd paper R21-100.000W T.C. C35-.Olmfd pap. air trimmer 060-.015mfd paper R22-900w 1W C36-.lmfd pap. C15-2550mmfd C61-.Olmfd paper R23-5.5w Wire /Wd. C37-.5mfd pap. mica padder C62-8mfd 525PV R51-400W 1/3W C38-70mmfd Sil. C16-1400mmfd C63-.015mfd paper R52-100w 1/3W C39mica mica padder C64-.Olmfd paper R53-100w 1/3W C40-110mmfd C17-.lmfd pap. C65-300mmfd mica Cl -53mmfd Sil.Mica mica

VIBRATOR POWER UNIT LAYOUT DIAGRAM







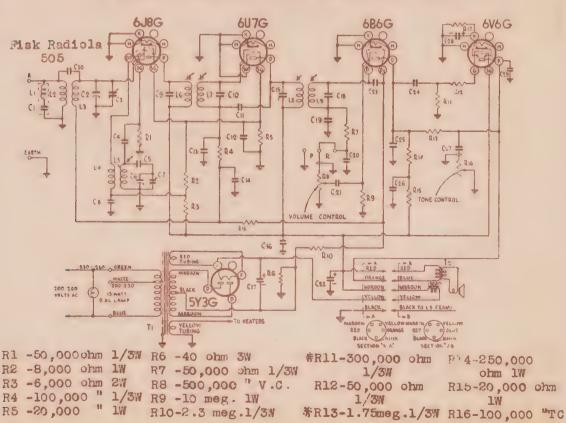
HOTPOINT-BANDMASTER C56SB, C56SB/V, B26SB & B26SB/V (Continued)

NOTE: For Conversion from "B" Battery to Vibrator Power Unit Operation-refer to instructions contained in Model 275 in this book with the following addition to (b) In the Table Model cabinet place unit on floor near set. CONVERSION FROM VIB.POWER UNIT TO BATTERY OPERATION - (a) Disconnect and remove the Unit. (b) Connect the battery cable to plug on chassis, not forgetting to insert tip attached to cable in receptacle adjacent to plug, and connect batteries.

1D50	VALVE G R.F. Amp. 3 Converter	M.W.	Control Grid to Chassis Volts -1.5*	Screen Grid to Chassis Volts 45 55	Plate to Chassis Volts 135 135	Plate Current M.A. 2 0 1.8 2 2	Filament Volts 2.0 2.0
	Oscillator	M.W.	-	=	70	2.2	•
		S.W.		-	130	3.5	-
1D50	I.F. Amp.		+ *	45	135	2.0	2.0
1K70	Det.& A.F.	Amp.	-1.5*	30 *	60 At	0.25	2.0
1H40	A.F. Amp.		-9 *	-	130	3.0	2.0
1J60	3 Output		-3	-	135	• 3.5	2.0

*Cannot be measured with ordinary voltmeter. T-1.5 volts bias on Medium Wave & 75-200 M. bands. Zero bias on remaining bands. Measured with no signal input. Volume control at maximum.

HOTPOINT-BANDMASTER C35ME, D55DE, C35DE & B35DG 5 Valve, One Band (C35ME) and Two Band (D55DE, C35DE, B35DG)



HOTPOINT-BANDMASTER C35ME (Continued)

R17-250 ohm 3W	C6 -11-29mmfd air	C15-70mm fd 941	000 10 B4 REAT
			C22-16mfd 350V
R18-1.75meg.1/3W	trimmer	Mica	Reg. elect.
Cl -50mmfd Sil.	0805mfd paper	Cl6lmfd pap.	C2402mfd paper
Mica	C9 -70mmfd S11.	C17-16mfd 525PV	C25-200 mmfd mica
C2 -2-20mmfd air	mica	elec.	C265 mfd paper
trimmer	Clo-70mmfd Sil.		*C27lmfd paper
C3 -Tuning cond.	mica	Mica	C28- 25mfd 25V
C4 -70mmfd mica	Cll-4mmfd mica	Cl9-llommfd mica	electro
C5 -490mmfd mica	Cl2lmfd paper	C20-llommfd mica	
padder	Cl3Olmfd pap.	C21Olmfd paper	0290025mfd pap.
C7 -Tuning Cond.			
	Cl405mfd pap.	C23-50mmfd mica	
See Circuit M	odification.		

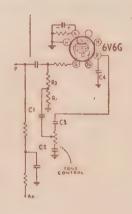
Tuning Ranges of these Models: "Short Wave" 13.6-43M. "Standard Medium Wave" -1600-550 K.C. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" -600 K.C. (Osc.), 1500 K.C. (Osc. & Aer). "Short Wave" -15M.(Osc.&Aer.) INTERMEDIATE FREQ.: 455 K.C. POWER CONSUMPTION: 75 Watts.

CIRCUIT MODIFICATION.

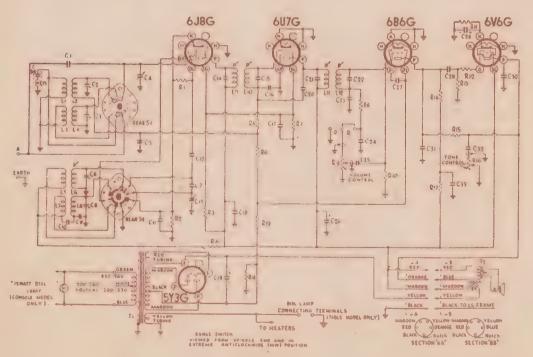
A modification to the Tone Control circuit which took effect from 4/4/41, was made to the sets concerned in this group. The circuit diagrams shown are those used in the first production period and the accompanying diagram shows the circuit arrangement adopted after the above date. The components not coded in the diagram were not affected.

R1 - 100,000 ohms 1/3W R2 -390,000 ohms 1/3W C1 - 1500 mmfd mica C2 -.005mfd paper

C3 -.05mfd paper C4 - .0025 mfd



HOTPOINT-BANDMASTER D55DE, C35DE & B35DG



HOTPOINT-BANDMASTER D55DE, C35DE & B35DG (Continued)

1/3W R2 -350 ohm 1/3W	R13 -300,000 ohm 1/3 Watt R14-250,000 ohm 1 Watt	C6-11-29mmfd air trinmer C7 -490mmfd mica padder	C20-4mmfd mica C21-70mmfd Sil. mica C22-70mmfd Sil.
	R15 -1.75 meg.	C8 -2-10mmfd air	mica
	1/3 Watt	trimmer	C23-llOmmfd mica
1 Watt	R16-100,000 ohm	C9 -4000mmfd mica	C24-llommfd mica
R5 -100,000 ohm	Tone Control	padder	C25Olmfd paper
1/3 Watt	R17-20,000 ohm	Clllmfd paper	C26-16mfd 350V
R6 -1.75 meg.1/3W	1 Watt	Cl2- 70mmfd mica	reg.electro
	R18-40 ohms 3W	Cl3-Tuning Cond.	C27-50mmfd mica
1 Watt	R19-2.3 meg:1/3W	Cl4-70mmfd Sil.	C28-25mfd 25V
R8 -50,000 ohm	Cl -4mmfd mica	mica	elect.
1/3 Watt	c2 -2-20mmfd air	C15-70mmfd S11.	C2902mfd pap.
R9 -500,000 ohm	trimmer	mi ca	0300025mfd pap.
	C3 -6-24mmfd air	Cl6Olmfd pap.	C31-200mmfd mica
R10-10 meg. lW	trimmer .	Cl7lmfd pap.	#C32lmfd pap.
R11- 250 ohm 3W	C4 -Tuning Cond.		C335mfd pap.
R12-50,000 onm	C5 O5mfd pap.	C19-16mfd 525V	C34-50mmfd Sil.
1/3 Watt	CloO5mfd paper	elect.	mica

x See circuit modification, previous page

SOCKET VOLTAGES (Model C35ME)

VALVE		Grid to Chassis	Grid to Chassis	Ann Chin in the th	Plate Current	Heater
6J8G Converter	Volts O	Volts	Volts 85	Volts 265	M .A. 1.0	Volts 6.3
Osc.	en en	-	_	140	5.0	-
6U7G I.F. Amp.	0 .	-3.0*	85	265	6.0	6.3
6B6G Det.	0	0		130*	0.5	6.3
6V6G Output	13.0	0	265	250	47	6.3
5Y3G Rectifier	800/400	Volts.	75 M.A.	Total Cu	rrent.	

Voltage across loudspeaker field - 120.

* Cannot be measured with ordinary voltmeter.

Measured at 240 volts A.C. supply.

No signal input. Volume at maximum.

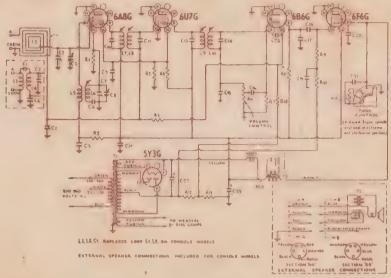
SOCKET VOLTAGES (Models D55DE, C35DE& B35DG)

6J8G	Converter	M.W.	Volts	Contro Grid to Chassis Volts -3.0*		Plate to Chassis Volts 265	Plate Current M.A. 1.0	
eti 70	Osc.	S.W. M.W. S.W.	-	0 - -3.0**	85 	265 140 140	1.2 5.0	6.3
6B 6G 6V 6G	Detector Output		0 13.0	0	265	130 * 250	0.5 47	6.3 6.3
Volt	Rectifier tage across nary voltme volume at	ter.	dspeaker Measure	field -	120. *	Cannot be	measured	with nal in-

HOTPOINT-BANDMASTER A65ME, A65MG, A45ME & A45MG

5 Valve One Band A.C. Operated Superheterodynes

TUNING RANGE: "Standard Medium Wave" — 1600-550 K.C. R.F. ALIGNMENT SETTINGS: 600 K.C. (Osc.), 1500 K.C. (Osc. and Aerial). INTERMEDIATE FREQ.: 455 K.C. POWER CONSUMPTION: 60 watts. VALVE COMPLEMENT: (1) 6A8G Freq. Converter. (2) 6U7G I.F. Amplifier. (3) 6B6G 2nd Det. AVC and A.F. Amp. (4) 6F6G Output Pentode. (5) 5Y3G Rectifier. LOUDSPEAKER: Models A65ME and A65MG — 5". Models A45ME and A45MG — 12". Field Coil Resistance: Models A65ME and A65MG — 1000 ohms. Models A45ME and A45MG — 2000 ohms. UNDISTORTED POWER OUTPUT: 3 watts.



SOCKET VOLTAGES (A65ME and A65MG).

SOCKET VOLTAGES (A45ME and A45MG).

	VALVE.	Control Grid to Chassis Volts.	Screen Grid to Chessia Volts.	Plate to Chassis Volts,	Plate Current M.A.	Heater Volts.	4400	VALVE.	Crid to Chassis Voits.	Grid to Chassis Volts.	Plate to Chassis Volts	Plate Current M.A.	Heater Volts.	
6A8G	Detector	-3°	95	240	3	6.3	6A8G	Detector	-3°	95	240	3	6.3	
	Oscillator	_		160	4	-		Oscillator	-	_	160	4	_	
6U7G	I.F. Amo.	-3*	95	240	8.5	6.3	6U7G	I.F. Amp.	-3°	95	240	8	6.3	
6B 6G	2nd Det.	0	_	120°	05	6.3	686G	2nd Det.	0	_	120°	0.5	6.3	
6F6G	Pentode	-17*	240	225	30	. 6.3	6F6G	Pentode	-17°	240	225	30	6.3	
5Y3G	Rectifier	640/320	volts 60	M.A. Total	Leurrer	nt 5.0	5Y3G	Rectifier	740/370	volts, 60	M.A. To	tal curre	nt, 5.0	

Voltage across loudspeaker field—60 volts.

*Carnot be measured with ordinary voltmeter

Voltage across loudspeaker field—120 volts.

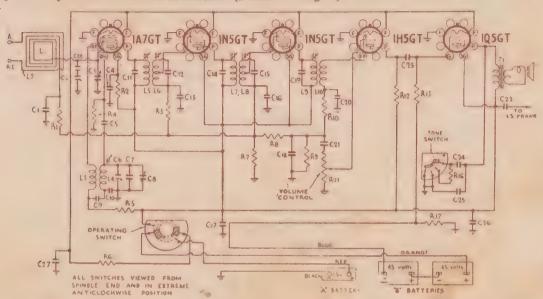
*Cannot be measured with ordinary voltmeter

Code	Part		Code	Part	C13	115 mmfd mica (A)
No	No.	RESISTORS.	No.	No. CONDENSERS	C14	115 mmfd, mica (A).
R1		50,000 ohms 1/3 W.	CI	4 mmtd mica		
R2		20,000 ohms 1 W.		(Console only).	C15	1 110 mmfd, mice til.t.
R3		30,000 ohms 1 W.	(2	5462A 6-14 mmtd, air trim,	C16	.01 mtd. paper
R4		20,000 chms 2 W.	C3	7645 - Tuning condenser,	C17	· 350 mmfd. mice.
R5		1.75 megohms 1/3 W.	64	.OS mfd, paper,	C18	.01 mfd, paper
RS	7690	500,000 ohms Vot.	C5	.05 mfd. paper.	CI9	.035 mfd. paper
R7		10 megohms 1 W.	C6	420 mmfd, mice (padder),	C20	.02 mfd, paper (Mantel).
RB		250,000 ohms 1 W.	C7	4849A 16-24 mmtd. air trim.		
R9		500,000 ohms 1/3 W.	CB			.005 mfd. paper
R10		25,000 ohms 1/3 W.				(Console),
RH		5000 ohms 1/3 W.	C9	.1 mfd. paper,	C21	.035 mfd. paper
R12		250 ohms 3 W.	C10	70 mmfd mica (N).	C22	8 mfd. 500V electro
R13		50 ohms 3 W	CIT	70 mmfd mica (N).	C23	8 mfd 525V electro.
R14		1.75 mags. 1/3 W.	C12	.1 mfd. paper.	C24	50 mmfd. mica (D).

HOTPOINT-BANDMASTER A75MB Portable Five

5 Valve One Band Dry Cell Battery Operated Portable Superheterodyne

TUNING RANGE: "Standard Medium Wave" — 1600-550 K.C. R.F. ALIGNMENT SETTINGS: 600 K.C. (Osc.), 1500 K.C. (Osc. and Aer.). INTERMEDIATE FREQ.: 460 K.C. BATTERY COMPLEMENT: "A" Battery — 1 Eveready PR8 or equivalent 1.5 volt dry cell. "B" Battery — 2 Eveready PR45. or equivalent 45 volt "B" Batteries. CURRENT CONSUMPTION: "A" Battery — 0.3 amp. "B" Battery — 9.5 M.A. VALVE COMPLEMENT: 1A7G or 1A7GT — Converter. 1N5G or 1N5GT — Output I.F. Amp. 1N5G or 1N5GT — 1.F. Amp. 1H5G or 1H5GT 2nd Det. AVC and A.F. Amp. 1Q5G or 1Q5GT Output Pentode. LOUDSPEAKER: (Permanent Magnet).



EARLY PRODUCTION CIRCUIT DIAGRAM & DATA, MODEL A75MB

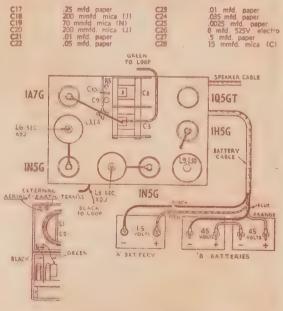
Code No. L1, L2 L3, L4 L5, L6 L7, L8 L9, L10	Part No. 7618 7615 5688 5688 5759	COILS Loop Aerial Oscillator Coil 1st 1 F. Transformer 2nd 1 F. Transformer 3rd 1 F. Transformer	R12 R13 R14 R15 R16 R17		1 meg. 1 W. 1.75 meg. 1/3 W. Deleted Deleted 20,000 ohms 1/3 V- 650 ohms 3 W.
L9, L10	2/37	TRANSFORMER	Code Ne.	Part No	CONDENSERS
71	-TT101	Loudspeaker Trans- former	C1 C2	7625 7622	05 mfd. paper 8-50 mmfd mica trim Tuning condenser
Code No.	Part No.	RESISTORS	C2 C3 C4 C5 C6 C7	1922	.01 mfd, paper 50 mmfd, mica (D)
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11	7626	500,000 ohms 1/3 W. 70,000 ohms 1 W. 200,000 ohms 1/3 W. 200,000 ohms 1/3 W. 40,000 ohms 1 W. 2 ohm wire wound 1 megohm 1/3 W. 1.75 megohms 1/3 W. 500,000 ohms 1/3 W. 20,000 ohms 1/3 W. 4 meg Volume Control	C6 C7 C8 C9 C10 C11 C12 C13 C14 C15	7625 7622	8-50 mmfd, mica frim. 9 mmfd, mica (B) Turing condenser .05 mfd paper 420 mmfd mica (A) 115 mmfd mica (A) 130 mmfd, mica (H) .05 mfd, paper 115 mmfd mica (A) 130 mmfd mica (H) .05 mfd paper

SOCKET VOLTAGES.

VALVE	to Chassis	Grid to Chassis Volts.	Plate to Chassis Volts.	Plate Current M.A.	Filament Volts.
IA7G Detector	0	35	84	0.26	1.4
Oscillator		_	55	0.75	
1N5G 1st I.F. Amp	0	84	84	1.0	1.4
INSG 2nd I.F. Amp	0	84	84	1.0	1.4
1H50r 2nd Detector	0		60°	025	1.4
1Q5GT_Output	6°	84	80	45	1.4

Total "B" battery current 9.5 M A Cannot be measured accurately with ordinary voltmeter.

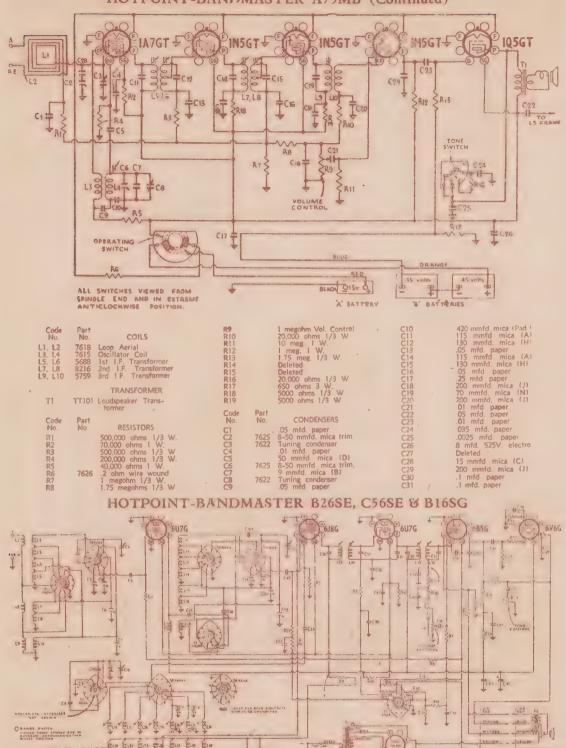
Measured with no signal input. Volume control at maximum clockwise.



Layout Diagram and Battery Connections.

NOTE: In the above diagram the "A" and "B" batters leads are shown combined in the one cable in production the "A battery leads are separate and enter the receiver chassis at the rear.

HOTPOINT-BANDMASTER A75MB (Continued)



MATE - Stout AND SEAS CONTACTS

5436

ALICA SALVESTONIA

SECTION AL SECTION BE LEUCOSPENIEN TOUS OFFI HOUSE HOUSE HOUSE

6U5

HOTPOINT-BANDMASTER B26SE, C56SE & B16SG

6 Valve 7 Band, A.C. Operated Superheterodynes. INTERMEDIATE FREQUENCY: 455 K.C. Power Supply Rating - 200/260 Volts, A.C. 50-60 cycles. Power Consumption - 80 watts. LOUDSPEAKER: Model C56SE - 7 inch. Models B26SE & B16SG - 12 inch Undistorted Power output - 4.2 watts.

7.7 2 3 /27195	DOE 7 7 /400	015 0550	074 70 01 4 (77)
R1 -lmeg.1/3W	R25-1 meg.1/3W	C15-2550mmfd	C34-30mmfd mica (U)
R2 -50,000 ohm	R26-1 meg. 1W	mica padd.	Console
1/3 Watt	R27-20,000 ohm 1W	C16-1350mnfd	C35-30mmfd mica (U)
R3 -100,000 ohm	R28-1.75 meg.1/3W	mics pad.	Console
1/3 Watt	R29-1 meg.1/3W	C17-200mmfd Sil.	C34-110mmfd mica
R4 -20,000 ohmlW	R30-50,000 ohm	mica)L) Table
R5 -50.000 ohm	1/3W (Consols)	Cl8-50mmfd Sil.	C35-llOmmfd mica
1/3 Watt	Cl -53mmfd Sil.		
R6 -500.000 ohm	mica	mica	(L) Table
		C19-3-30mmfd	C3602mfd paper
Vol.Cont.	C2 -5-50mm fd	mide trim.	C37lmfd paper
R7 -1.75meg.1/3W	mica trim.	620-3-30mmfd	C38-16mfd 525V
R8 -1.75 % W W	03 -5-50mmfd	mica trim.	electro
R9 -20,000 ohm2W	· mica trim.	C21-3-30mmfd	C39-50mmfd mica
R10-15,000 " lW	C4 -Tun . Cond .	mica trim.	C40-200mmfd mica
R11-20 ohms 3W	C5 -200mmfd 311.	C22-3-50mm fd	
R:2-20 ohms 3W	mica		C4102mfd paper
R13-2.3meg.1/3W	C6 -5-50mmfd	mica trim.	C42lmfd paper
R14-11 ohms 3W	mica trim	G23-Tun.Cond.	C435mfd paper
R15-20 ohms 3W	C7 -5-50mmfd	C24-70mmfd Sil.	C44lmfd paper
		mica	C45-16mfd 350
R16-500,000 ohm	mica trim.	025lmfd pap.	reg. electro
1/3W	C8 -40mmfd temp.	C26-70mmfd Sil.	
R17-1.5meg. 1W	compensated	mica	C46-25mfd 25V
R18-200,000 ohm	C9 -11-29mmfd	C27-70mmfd Sil.	electro
1 Watt	air trim.	mioa	C47imfd paper C480025mfd pap.
R19-3 meg.1W	C10-490mmfd	C28Olmfd pap.	(Console)
R20-500.000 ohm	mioa padder	C29lmfd pap.	C49-200mmfd Sil.
1/3W	Cll-2-lommfd	C3005mfd pap.	
R21-250 ohm 3W	air trim.	C31-4mmfd mica	mica
R22-50.000 ohm	Cl2-Tun.Cond.		C50-53mmfd S11.
1/3 Watt		C32-70mmfd Sil.	mica
R23-100,000 ohm	013-2-20mmfd	mioa	C51O5mfd paper
Tone Cont.	air trim.	C33-70mmfd Sil.	C5205mfd paper
	C14-11-29mmfd	mica	
R24-50,000 ohmlW	air trim.		

SOCKET VOLTAGES

	Control	Cathode	Screen			
	Grid to	to	Grid to	Plate to	Plate	Heater
VALVE.	Chassis	Chassis	Chassis	Chassis	Currt	. Volts
	Volts	Volts	Volts	Volts	M.A.	
6U7G R.F. Amp.	-3.9*	0	100	255	7.0	6.3
6J8G Converter M.W.	-3.9等	0	100	255	0.8	6.3
S.W	-4.5*	0	100	255 0.0	8.0-8	
Oscillator	- ,	-	-	150	5.0	_
6U7G I.F. Amp.	-3.9	0	100	255	7.0	6.3
6B8G Detector	-1.5章	0	30 🛪	125 🐡	0.5	6.3
6V6G Output	0	12.5	255	245	44.0	6.3
5Y3G Rectifier (Mante)	L) 700/350V	80 M.A.	. Total	current Di	rain	5.0
5Y3G Rectifier (Consol	Le)800/400V	. 80 M.	A. Total	current o	drain	5.0
Cannot be measured	with ordin	pary volt	meter.	Measured	with	Receiv-

er connected to 240 volts A.C. supply. Volume Control at maximum.

No signal input.

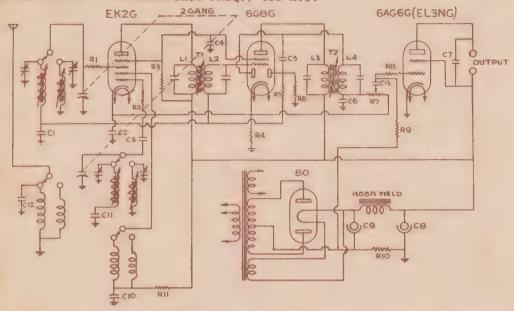
NOTE: For information re Gramophone Motor Service see Models A28QE & A18QA.

KRIESLER RADIO

Manufactured by Kriesler (Aust.) Pty. Ltd., Sydney, N.S.W.

KRIESLER 306A

VALVES: EK2G Converter. 6G8G I.F. Amp. 2nd Det. AVC. EL3 or 6AG6G Output. 80 Rectifier. INTERMEDIATE FREQ.: 455 K.C.



R1 - 50 ohms NW	R7 - meg. V.C.	C25 200V	C8 -18 350
R2 -50 ohms aw	R8 -20,000 1W	C30001 mica	C9 -8 525
R3 -75,000 1W	R9 -1 meg. W	C41 400V	C101 400V
R4 -250 ohm 1W	R10-160 ohm 3W	C500005 mica	Cll-350 mmfd
R5 -1 meg. ½W	R11-20,000 1W	C60005	C12005
R6 -1 meg. N	C11 200V	C7005	C13005

D.C. VOLTAGE USING 1000 OHMS. P/V. METER

					GRIEG & RESERV
	EK2	6080	EL3	80	SCALE USED
Plate	250	250	230		250
Screen	75	75	250		250
Osc. plate	180				250
Fixed grid bias			7	•	10
Cathode Bias	2.7	2.7			10
Filament A.C.	6.5	6.3	6.3	5	10 A.C.

SPEAKER: 1500 ohms field

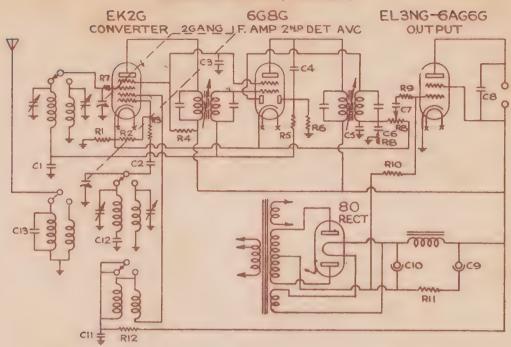
KRIESLER 3K20

3-4 Dual Wave A.C. Receiver

VALVES: EK2G Converter. 608G 2nd Det AVC. EL3NG or 6AG6G Output. 80 Rectifier. WAVE RANGES: 1700 KC - 550 KC. 13M - 38 M. I.F. Freq. 455 KC.

C1	_	.lmfd 200V	C6002 mfd	Clllmfd 400V	R3,R7-50 ohm aw R4 - 75,000 lw
		.0001 mfd	C7005 mfd	C12- 335 mmfd	R5, R6, R10-1 meg. 1W
C3	_	.lmfd 400V	C8005 mfd	Cl30005 mfd	R85 meg. cont.
		.00001 mfd	-09 - 16 mfd 350V	R1 - 250 ohms 1W	R9,R12-20,000 1W
C5	-	.0005 mfd	C10-8 mfd 525V	R2 - 20,000 ohm 1W	

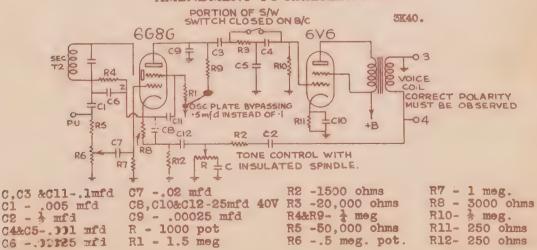
KRIESLER 3K20 (Continued)



D.C. VOLTAGE USING 1000 OHMS P/V METER

	EK2G	6 08G	ELSNG	80	METER SCALE USED
	BAZU	ouou	PLONG	80	SCATE OSED
Plate	250	250	243	350 A.C.	500 Volts & 500 A.C.
Screen	75	75	250		
Osc. plate	165				
Cathode to Earth	250 ohms	250 ohms		365 volts	
Cathode Bias	2.8	2.8			
Filament A.C.	6.3	6.3	6.3	5	
SPEAKER: 1500 ohms field	•				

AMENDMENT TO KRIESLER 3K40

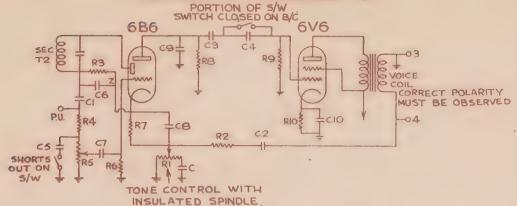


R6 - .5 meg. pot.

R12- 250 ohms

R1 - 1.5 meg

AMENDMENT TO KRIESLER 3K30

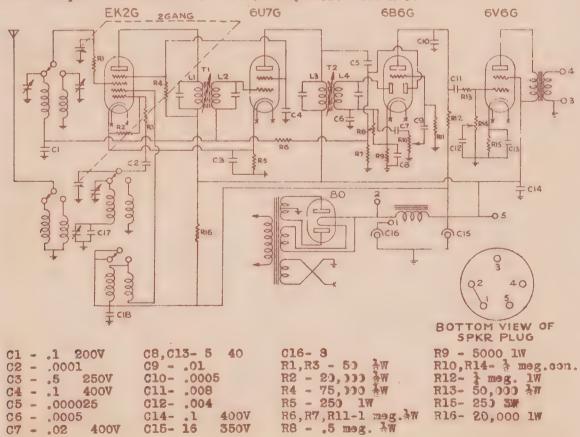


C6 - .00025 mfd R6 - 1 meg C & C3- .1 mfd R1 - 1000 pot C1 - .005 mfd C2 - 3 mfd C7 - .02 mfd R2 - 1500 ohms R7 - 3000 ohms C8 - 25mfd 40V $R3 - \frac{1}{4} \text{ meg.}$ R4 - 50,000 ohms $R8 - \frac{1}{4} \text{ meg}$ $R9 - \frac{1}{5} \text{ meg}$ C4 - .001 mfd C9 - .00025 mfd C5 - .0015 mfd C10- 25 mfd 40V R5 - .5 meg.R10- 250 ohms

KRIESLER 3K28

4-5 Valve Dual Wave Receiver

VALVES: EK2G Converter. 6U7G I.F. Amp. 6B6G 2nd Det. Audio amp. AVC. 6V6G Output. 80 Rectifier. I.F. FREQUENCY: 455 K.C.

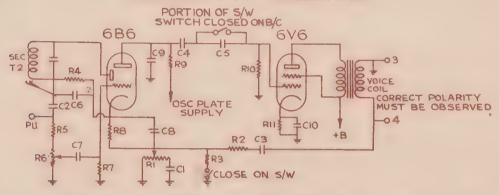


KRIESLER 3K28 (Continued)

D.C. VOLTAGE USING 1000 OFMS P/V. METER

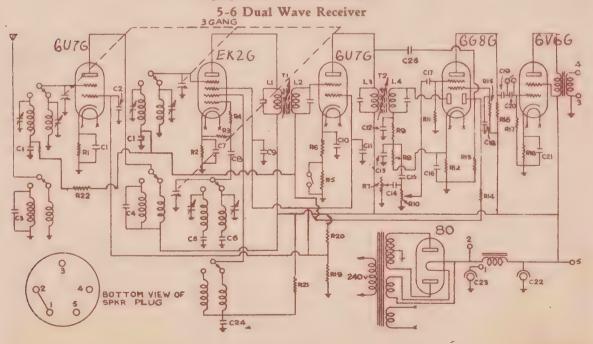
Plate Screen Osc. Plate	EK20 250. 75 190	607G 250 75	5B6G 85	6V6G 240 250	80	SCALE USED 250 250
Fixed Grid Bias Cathode Bias Filament A.C. SPEAKER: 1500 ohms	2.8 6.3	2.8	1.25 6.3	12 6.3	5	10 & 50 10 A.C.

AMENDMENT TO KRIESLER 3K28



Cl & C41 mfd	C6 &C900025 mfd	R2 - 2000 ohms	R7 - 1 meg.
C2005 mfd	C702 mfd	R3 - 500 ohms	R8 - 3000 ohms
C3 - ½ mfd	C8 - 25 mfd 40V	R4 - 1 meg	R9 - 1 meg
C41 mfd	Clo- 25mfd 40V	R5 - 50000 ohms	R10- % meg
C5002 mfd	R1 - 1000 pot.	R6 - \$5 meg. pot.	R11- 250 ohms

KRIESLER 3K41



KRIESLER 3K41 (Continued)

C1,C7,C1C1 200 C2.C9,C11,C18 &	C12,C130001 C14002	R4 -50 ohm 3W R5.R12-2000 1W	R15- 1.5 lW R16- 1 meg. lW
C241 400	C1502	R6 - 250 W/W	R18- 250 ohms 3W
C3,C200005	C16,C21-25 40	R75 T/C	R19- 6000 5W
C400025	C17.C19O1	R8.R11.R175 1W	R20- 10.000 5W
C5 - 415 mmfd	022 - 16 350	R9 -100,000 1W	R21- 20,000 1W
C6005	R1 R2-450 ohm W/W	R105 V/C	R22- 50.000 NW
C8,C2500005	R3 -50,000 lW	R13,R14-1 meg 1W	C23- 8 525

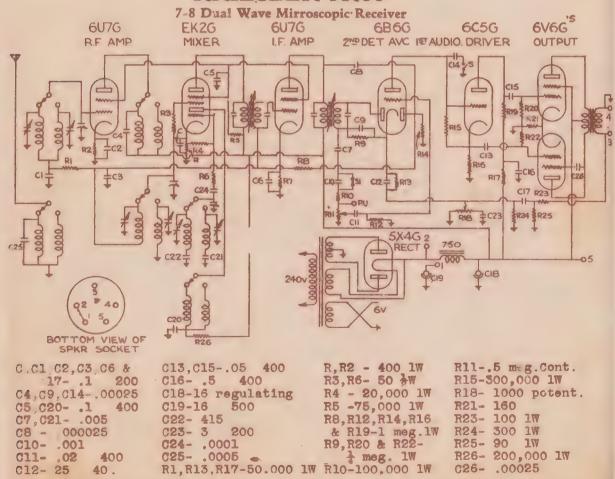
D.C. VOLTAGE USING 1000 OHMS P/V METER

							METER
	6U7G	KK2G	6U7G	6686	6V6G	80	SCALE USED
Plate	225	225	225	65	220		250
Screen	75	75	75	25	225		250
Osc. plate	175						250
Fixed Grid Bias			4.5				10
Cathode Bias	1.5	1.5	1.5		12.5		10 & 50
Filament A.C.	6.5	6.3	6.5	6.3		5	10

SPEAKER FIELD: 1500 ohms

VALVES: 6U7G R.F. Amp. EK2G Converter. 6U7G I.F. amp. 6G8G 2nd Det. AVC Driver. 6V6G Output. 80 Rectifier. WAVE RANGES: 1700 KC - 550 KC. and 13 M - 38 M. I.F. Freq. 455 K.C.

KRIESLER 3K60



KRIESLER 3K60 (Continued)

Switch S is closed on S/W and Sl is closed on B/C. C26 is not incorporated in all sets.

VALVES: 6U7G R.F. amp. EK2G'Mixer. 6U7G I.F. amp. 6B6G 2nd Det. AVC 1st Audio. 6C5G Driver. 2-6V6G Output. 5X4 Rectifier. WAVE RANGES: 1700 KC - 550 KC. 13M - 38M. I.F. Freq. 455 KC.

D.C. VOLTAGE USING 1000 OHMS P/V METER

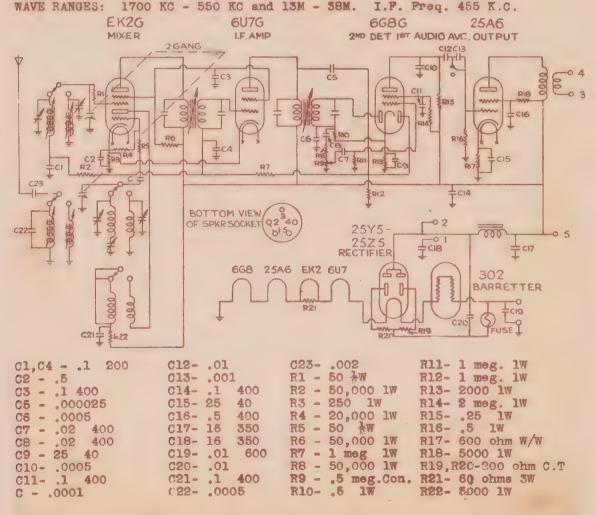
MUTTER

61170	RK2G	6117.0	SBSG	6050	SVEG	SY4	SCALE USED
						OAT	250-1000
75	75	75			260		250-1000
	200						250
				85			250
3	2.9	3	.2	1 40	13		10-50
6.3	6.3	6.3	6.3	6.3	6.3	5	10
0 ohms							
	3 6.3	260 260 75 75 200 3 2.9 6.3 6.3	260 260 260 75 75 75 200 3 6.3 6.3 6.3	260 260 260 20 75 75 75 200 3 .2 6.3 6.3 6.3 6.3	260 260 260 20 160 75 75 200 85 6.3 6.3 6.3 6.3 6.3	260 260 260 20 160 250 75 75 260 200 85 6.3 6.3 6.3 6.3 6.3 6.3	260 260 260 20 160 250 260 200 260 260 260 260 260 260 260 26

KRIESLER 3K75

5-6 Dual Wave, A.C./D.C. Receiver

6U7G I.F. amp. 6G8G 2nd Det. 1st Audio AVC. 25A6G -VALVES: EK2G Mixer. Output. 302 Barretter. 2525 Rectifier.



KRIESLER 3K75 (Continued)

D.C. VOLTAGE USING 1000 OHMS P/V METER

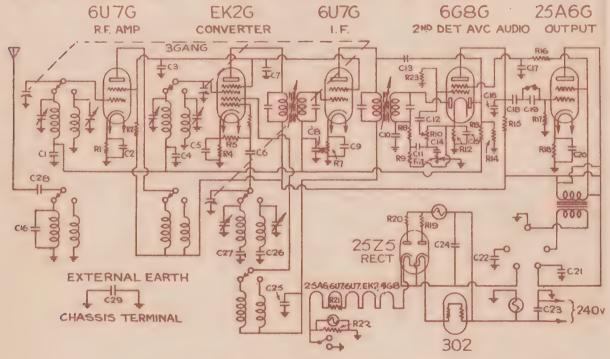
	EK2G	6070	6080	25A6G	302	2525	METER SCALE USED
Plate	175	175	30	165		AC	250
Screen	75	75	20	175			250
Osc. plate	165						250
Cathode Bias	2:5	2.5	1	22.5			10 & 50
Filament A.C.	6	6	6		25	25	50
Power Consumption	84	Watts					•
Speaker Field - 1500	ohms						

KRIESLER 3K90

6-7 Dual Wave A.C./D.C. Receiver

VALVES: 6U7G R.F. amp. EK2G Converter. 6U7G I.F. 6G8G 2nd Det. AVC audio 25A6G Output. 302 Barretter. 25Z5 Rectifier.

WAVE RANGES: 1700 KC - 550 KC and 13M-38M I.F. Freq. 455 KC.



D.C. VOLTAGE USING 1000 OHMS P/V METER

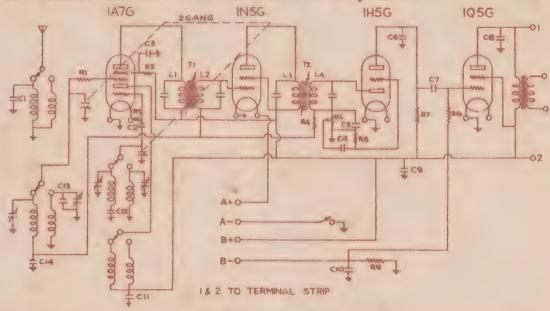
	9				, ,	•	
							METER
	6U7G	EK2G	607G	6686	25A6G	2525	SCALE USED
Plate	170	170	170	25	160	240AC	250
Screen	100	100	100	18	170		250
Osc. plate		170	•				
Cathode Bias	3	2.5	3	1.5	19		10 & 50
Filament A.C.	6.3	6.3	6.3	6.3	25	25	
Power Consumption							
Speaker Field - 1500	ohma						
C1,C2,C3,C4,C5,C8	C6,C10-	.0001	mfd C	130000	025mfd	C18, C	26005 mfd
&C91mfd 200V	C11,C23				mfd 600V	C21,C	22-16mfd
C7.C17.C251mfd		Ol mfd		t5.C20-	5mfd 40V		350V
400	C1205	mfd 60	OV C	16000	05 mfd	C27-4	15 mmfd

KRIESLER 3K90 (Continued)

R1 - 400 ohm 1W R8 -100,000 1W R12-2000 ohm 1W R21.R22-60 ohm W/W R9, R17, R23-R2 - 20.000 5W R13,R14,R16 -R18- 600 ohm W/W R5 - 50,000 1W .5 meg. lw 1 meg. 1W R4 - 250 ohm 1W R15- 1 meg. 1W R19,R20-100 W/W C29- .Olmfd 600V 86 50 ohm 3W R10,R11-.5 meg C19- .001 mfd R7 - 400 ohm lW control

KRIESLER 3K95

VALVES: 1A7G Mixer. 1N5G I.F. amp. 1H5G 2nd Det. Audio Amp. 1Q5G-Output. WAVE RANGES: 1600-550 KC and 13M-35M. I.F. Freq. 455 KC.



R1 - 50 3W R2 - 40,000 1W R3 - 200,000 3W R4 - 1 meg. 3W	R6 - 5 meg. R7 - 1 meg. W R8 - 2 meg. W R9 - 500 1W	C2,C5,C6 - .0001 C3,C8,C141	C4,C7,C9002 C111 400 C12- 385 mmfd C13- 25 mmfd
R5 - 1 mog. 5"	C10005	Clo- 5 mfd	010- 50 mm

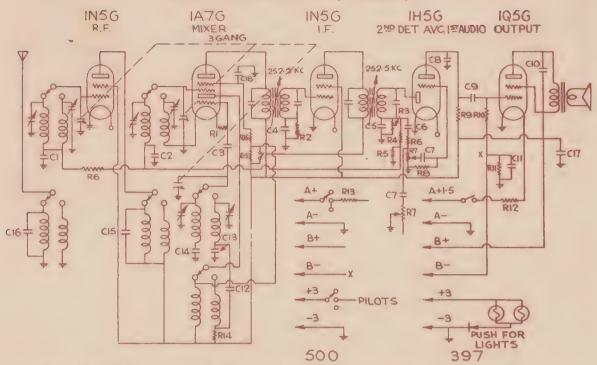
D.C. VOLTAGE USING 1000 OHMS P/V METER METER 1A7G 1N5G 1H5G 1056 SCALE US ED 250 Plate 85 85 30 83 Screen 50 85 85 250 Osc. plate Fixed Grid Bias 85 15 10 Cathode Blas Filament D.C.

KRIESLER 3K97 & 5K00

5 Valve Dual Wave, Battery Receiver

Cl1 200	C9002	C181 400	R8 - 5 meg. 1W
C21 400	Clo002	R1 - 200,000 1W	R9 - 1 meg. 1W
030001 1%	C11- 25 40	R2 - 1 meg. 1W	R11- 400 1W
C4.C121 200	C13005	R3 - 500,000 1W	R1225 ohms W/W
C50001	014- 710 mmfd	N4.R10- 2 meg.1W	R1325 ohms W/W
C601 600	C1500002	R5 - 1 meg. 1W	R14- 500 lw
c7002	C160005	R6 - 50,000 1W	R15- 50.000 lW
C80001	C175 400	R7 .5meg.cont.	R16- 20,000 1W

KRIESLER 3K97 & 5K00 (Continued)



VALVES: 1NSG R.F. Amp. 1A7G Mixer. 1NSG I.F. amp. 1HSG 2nd det. AVC lst. audio. 1Q5G Output.
WAVE RANGES: 1700 K.C. - 550 K.C. and 13.5M - 38M. I.F. Freq.: 252.5KC

D.C. VOLTAGE USING 1000 OHMS P/V METER

Plate Screen Osc. plate	1N50 85 85 85	1A7G 8 35	1N56 85 85	1H5G 30	1250 83 85 5	SCALE USED 250 250 10
Fixed Grid Bias Filament D.C.	1.4	1.4	1.4	1.4	1.4	2.5

KRIESLER 3K31A & 3K15A

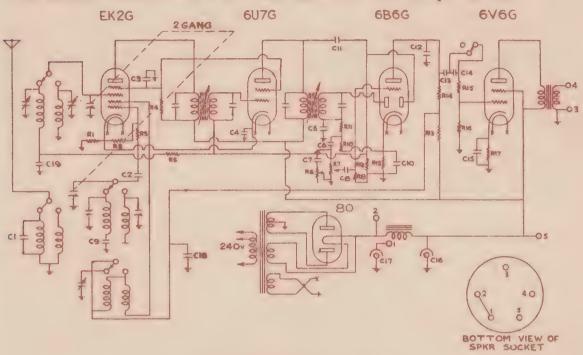
	4-5 Dual	Wave Receiver	
C1.C5.C12 &	C9 - 335 mmfd	R2,R11,R15-50,000	R10,R16- } meg. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
C140005	C10,C15- 25 40	4 Watt	R13-20,000 1W
C20001	C11000025	R3 - 50 ohm \(\frac{1}{2}\text{W}\)	R14- 1 meg. 1W
C3,C181 400	Cl301	R4 - 75000 1W	$R6,R7 - \frac{1}{2}$ meg.cont.
C45 200	C16- 16 350		C191 200
C6,C802	C17- 8 525	1. Watt	C17- 250 ohms 3W
C7002	R1 - 250 ohm lW	R12- 5000 1W	
	D.C. VOLTAGE USI	ng 1000 ohms P/V me	TER
			अतरण राष

Flate Screen Osc. plate	EK2G 260 75 165	607G 260 75	6B6G 100	6V6G 250 260	SCALE USED 1000 250 & 1000 250
Fixed Grid Bias Cathode Bias Filament A.C. Speaker Field - 1500 ohms	2.8	2.8	6.3	12.5 6.3	10 & 50 10

KRIESLER 3K31A & 3K15A (Continued)

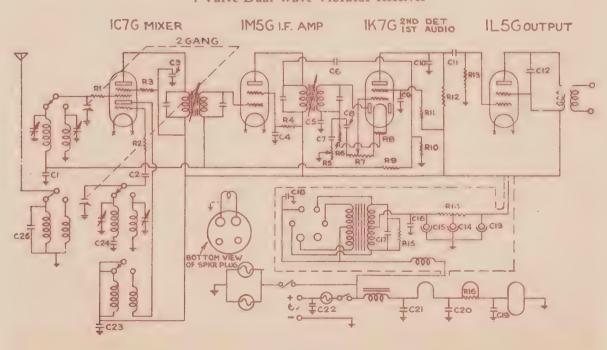
VALVES: EK2G Converter. 6U7G I.F. amp. 6B6G 2nd Det. AVC. 1st Audio. 6V6G Output. 80 Rectifier.

WAVE RANGES: 1700 KC - 550 KC. and 13M - 38M. I.F. Freq.: 455 K.C.



KRIESLER 4K35

4 Valve Dual Wave Vibrator Receiver



KRIESLER 4K35 (Continued)

VALVES: 1C7G Converter. 1M5G I.F. amp. 1K7G 2nd Det. Driver. AVC - 1L5G Output.

C11 200	C13,C15- 24	C24- 335	R8,R16-16.6 W/W
C20001	350	C250005	R9,R10,R11 -
C3,C4,C9,C23-	C14- 10	R1,R2- 50 W	1 meg. 1W
.1 400	C16005	R5 - 40,000 1W	
C5,C1000025	C17008 2000	R4 - 50,000 1W	R13- meg. 1W
C7,C12002	C185 400	R5,R75 meg.	R14-600 W/W
C805 SOO	C19,C225 200	Controls	
Cll01 600	C20,C21-500 12	R65 lW	C6000025

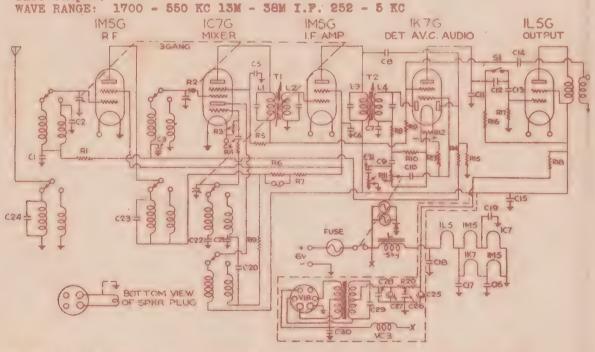
D.C. VOLTAGE USING 1000 OHMS P/V METER

					METER
	1076	1M50	1K7G	1L5G	SCALE USED
Plate	135	135	50	132	250
Screen	. 60	70	30	135	250
Osc. plate	135				250
Filament DC	2	2	2	2	10
+side Fil. to earth	2	2	4	6	10
"A" drain amps - 1	"B" drain - 18 1	MA			

KRIESLER 4K40

5 Valve Dual Wave Receiver

VALVES: 1M5G R.F. 107G Converter. 1M5G I.F. 1K7G 2nd Det. AVC 1st A.F. 1L5G Output:



C1,G3 - .1 200 C2 - .00001 C4 - .00007 C5,C6,C14,C20-.1 400 C7,C11- .00025 C8 - .000025 C9,C10-.02 400 C12- .001 C13- .01 C15- .5 400 C16,C19-.5 200 C17,C18-500 12 C21,C28-.005 C22- 710 mmf C23-20 mmf C24-.0005 C25,C27-24 350 C26-10 350 C29-.008 2000 C30-.5 200 R1,R3,R5,R6 & R8-50,000 lW R2,R4-50 ½/W

KRIESLER 4K40 (Continued)

R7 - 40,000 lW R10,R17- .5 R12,R20- R18-25 l Watt R9,R13,R14 & R15- l Watt 600 C.T R19-500 l Watt R11- .5meg.cont. R16-1 meg.lW C31 - .002

Sl is closed when set switches to Broadcast.

D.C. VOLTAGE USING 1000 OHMS P/V METER

MINISTRA

	1M5G	107G	1M5G	1K7G	1L5G	SCALE USED
Plate	130	130	130	50	127	250
Screen	50	50	50	25	130	250
Osc. plate		130				250
+side fil. to earth	2	2	4	4	6	10
Filament D.C.	2 .	2	2	2	2	10
Speaker: Permag.						

KRIESLER 4K70

5 Valve Dual Wave Vibrator Receiver r

VALVES: 1M5G R.F. Amp. 1C7G Converter. 1M5G I.F. Amp. 1K7G 2nd Det. AVC 1st audio. 1L5G output.

WAVE RANGES: 1700 KC - 550 KC and 13M - 38M . I.F. Freq. 252.5 KC.

IM5G 1076 IM5G IK7G CONVERTER I.F. AMP 2ND DET AVC IST AUDIO OUTPUT R.F. AMP 3GANG IC29 R7 CI4CIS RI3 RI4 R8 RIOS RQ 107 C24 R16 VC3 A+ 164 1 A-BOTT OM VIEW OF IM5 1M5 C1,C2,C6 & C7-C23- .002 R6 - 100,000 1W R8 - 100,000 1W C15,C28,C29-.0005 .1 200 C24- .C5 400 C16, 24 350 C27- 415 R9 - .5 meg. 1W R19- .5 meg. 1W C8,C13,C25- .1 C18- 24 350 R1 - 50,000 1W 400 R3 - 50,000 lW R2 - 50 + Watt R13- .25 1W R15- 600 W/W C5 - .00005C17- 10 C19- .005 C26- .005 C9 - .000025 R4,R7,R10,R11 & R16- 200,000 lW C10 - .0001 C20- .008 2000 C21- .5 200 C22- .02 600 Cll- .0001 R12- 1 meg.1W R17,R18-.5 meg.con. C12- .01 600 C14- .01 600 R5 ~ 40,000 1W R19-1000 1W C3, C4 - .1 400

KRIESLER 4K70 (Continued)

D.C. VOLTAGE USING 1000 OHMS P/V METER

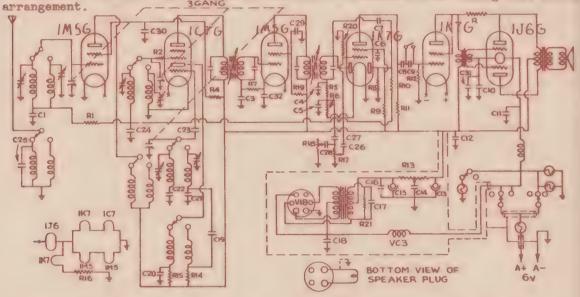
Plate	1M5G 135	1070 135	1M5G 135	1K7G 60	115G SCALE USED 130 0-250
Screen Osc. plate	BC40 SW50	50 125	BC40 SW50	30	135 0-250 0-250
Filament D.C. + Side Fil.to Earth "A" Drain Amps.	2 1.05	2	4	4	6

KRIESLER 4K80

6 Va 6 Valve Dual Wave Vibrator Receiver

VALVES: 1M5G RF Amp. 1C7G Converter. 1M5G I.F. Amp. 1K7G 2nd Det. AVC. 1K7G - Driver. 1J6G Output. WAVE RANGES: 1700 KC - 550 KC. and 13 M - 38 M. I.F. FREQ. 252 KC.

This circuit is used with type G3 vibrator transformer and Oak vibrator. When Mailory valve is used R21 is omitted, C17 is changed to .005 M/d and type H59 transformer is used. The filament drain will be somewhat lower using this latter arrangement.



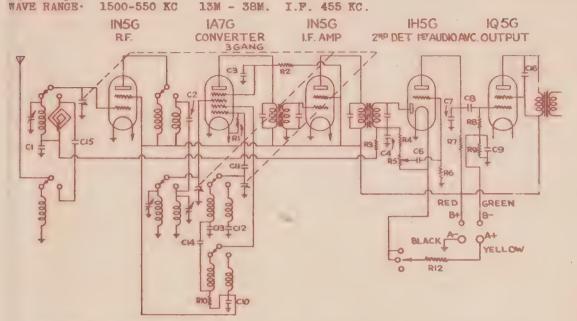
C1,C3,C24,C26,C31,	C125 400		R12- 1 meg. 1W
C321 200	C13.C15- 24 350	C28002	R13- 600 W/V
C4,C50001	C14 - 10	R1,R4,R15-50,000 1W	R14- 1000 1W
C6,C20,C29,C30 -	C16,C21005	R2 - 50 3W	R16- 33.3 3W
.1 400	C17008 2000	R5,R -100,000 1W	R17,R185 meg.
C7000025	C185 2000	R6 - 500,000 1W	controls
C801 600	C1905 400	R7,R8,R10,R20 -	R19-150,000 lW
C9.C250005	C22- 415	1 meg. 1W	R21- 200,000 1W
C10,C11-500 12	C2300005	Rll- 4 meg. 1W	R9 - 1.5 meg.

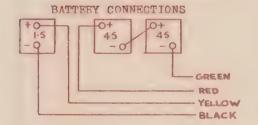
D.	.C. VOLTAG	E USING	1000	OHMS P/V	METER		MOTER
Plate	1M5G 135	107G 135	1M5G 135	1K7G 45	1K7G 150	1J6G 130	SCALE USED 250
Screen	40	40	70	173	-	-	250
Osc. plate	50 B/C 125 S/W						
Filament D.C.	2	2	2	2	. 2	2	10
+ Side Fil. to Earth	2	4	. 4	2	6	6	10
"A" drain amps.	1.15						

KRIESLER 4K88

5 Valve Dual Wave Receiver

VALVES: 1N5G RF . 1A7G Converter. 1N5G I.F. Amp. 1H5G 2nd Det. 1st Audio AVC 1Q5G Output.
WAVE RANGE: 1500-550 KC 13M - 38M. I.F. 455 KC.





CI,G5	1.	200
C2000	005	5
C4,C11 -	.00	001
C6,C8,C16	-	.00
C7000	5	
C9 - 25	40)
C12- 375		
C13005		
C1401	60	00
C15000		

R1 - 50,000 lW
R2 - 20,000 lW
R3,R7,R8-1 meg. lW
R4 - 100,000 lW
R5 - .5 meg. control
R6 - 5 meg. lW
R9 - 500 lW
R10- 1000 lW
R12- .25 ohms
C10- .5 400

KRIESLER 4K01 & 4K03

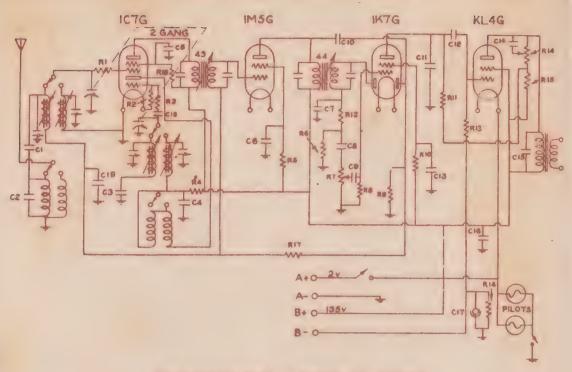
						METER
	1N5G	1A7G	1N5G	1H5G	1050	SCALE USED
Plate	84	84	84	50	80	250
Screen	84:~	55	84		84	250
Osc. plate		84				250
Fixed Grid Blas					-6	10
Filament D.C.	1.4	1.4	1.4	1.4	1.4	2.5
SPRAKER - Parmag	9000 obms					

KRIESLER 4KO1 & 4KO3

VALVES: 1676 - Converter. 1M56 - I.F. Amp. 1K76 - 2nd Det. A.V.C. KL46 - Output WAVE RANGES: 1650 to 550 Kc and 13 to 43 metres. INTERMEDIATE FREQ.: 455 Kc. Osc. frequency is higher than signal frequency on both bands.

01000005	C1100025	C191 200	R8 - 2 meg.1W	R16 - 400 ohm
020005	C1201 600	R1 -50 ohm W	R9 - 2 meg.lW	War O
03 -415 mmfd	C131-400V	R205 meg.lW	Rlo- 1 meg.lW	R17 - 2 meg-
040085	C14003 600	R3 -50 ohm W	R1125 meg.	ohm 1 W
05&061-400V	C15002	R4 -250 ohm	R1205 meg.1W	730 675
0700025	C165-400V	R5075 meg.lW	R13- 1 meg.1W .	R18075 meg-
08%0902	C17-25mfd 40V	R65 meg.lW	R145 meg.pot.	ohm
010000005	C180001	R75 meg.pot.	R15Olmeg.lW	
		-	0 -10	

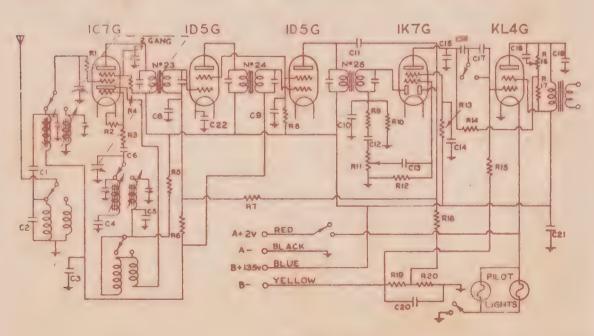
KRIESLER 4K01 & 4K03 (Continued)



KRIESLER 4K02 & 4K04

VALVES: 1076 Converter. 1D5G I.F. Amp. 1D5G I.F. Amp. 1K7G 2nd Det. A.V.C. KL4G Output.

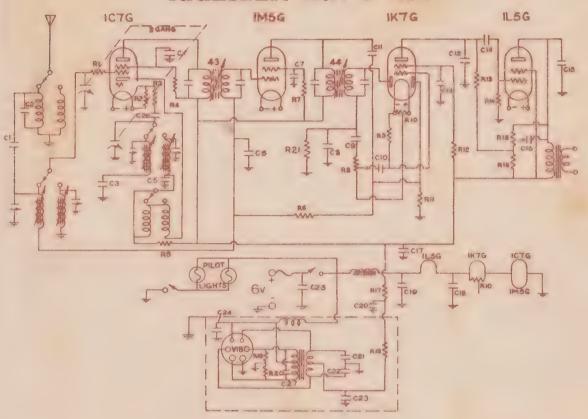
WAVE RANGES: 1650 to 550 Kc and 13 to 43 metres. INTERMEDIATE FREQ.: 455 Kc. Oscillator frequency is higher than signal frequency on both bands.



KRIESLER 4K02 & 4K04 (Continued)

C1000005	C1000025	C19002	R6 -250 ohm lW	R13- 1.5 meg. 1W
C20005	C1100025	C20- 25mfd 40PV	R605 meg.lW	R1425 meg. 1W
C31 200V	C12&11302	C215 400V	R7 - lmeg.lW	R15- 1 megohm 1W
C4 -415 mmfd	G141 4007	C225 200	R825 meg.lW	R165meg. pot.
C50085	C1500025	R1 -50 ohm W	R905 meg.lW	R170lmegohm 1W
660001	C1601	R205 meg.lw	R10-%5 megohm	R18- lmegorm lW
67&691 400	C17002	R3 -50 ohm kw	R115meg.pot	R19- 350 ohm lW
6805	C18003	R405 meg.lw	R12-lmeg.lW	R20- 100 ohm lW

KRIESLER 4K11 & 4K13



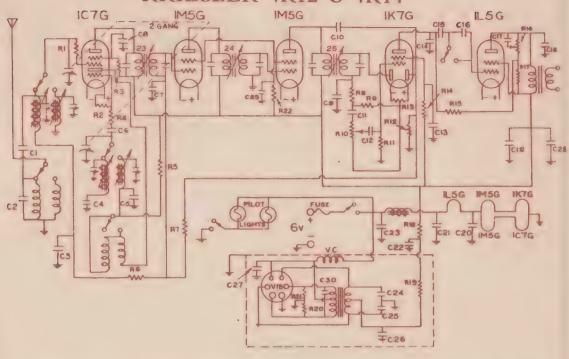
R1 - 50 chms R205 megchm R3 - 50 chm R405 megchm R5 - 250 chm R6 - 2 megchm R705 megchm R85 meg.pot. R9 - 1 megchm	R1325 megohm R14- 1 megohm R155 meg.pot. R1601 megohm R17- 250 ohm R18- 250 ohm R19- 250 ohm R20- 250 ohm C100005	C50085 C61 200V C71 400 C800025 C902 G10G1 C11000005 C121 400 C1300025	C16003 600 C17- 8 mfd 525V C18- 500 mfd 12V C19- 500 mfd 12V C20- 24 mfd C2101 C2201 C23- 24mfd C245
R85 meg.pot.	R20- 250 ohm	C121 400	023- 24mfd

VALVES: 1076 Converter. 1M5G I.F. Amp. 1K" End Det. ANT. 1184 datput.

WAVE RANGES: 1650 to 550 Kc and 13 to 43 metres.

INTERMEDIATE FREQUENCY; 455 Kc.
Oscillator frequency is higher than signal frequency on both bends.

KRIESLER 4K12 & 4K14



C1000005 C20005 C3,C705 C4 - 415 C50085 C60001 C8,C13,C23 & C17003 C291	C22,C26- 24 mfd C28- 16 mfd C301 200 R1,R4 - 50 ohm w R2,R3,R6 &	R5,R18,R19,R20 and R21- 250 obm R7,R9,R11 and R12- 1 megohm lW R10,R165meg. pot. R14- 1.5 meg. lW R15,R2225meg. lW R170lmegohm lW
--	--	---

m 1W VALVES: 107G Converter. 1M5G I.F. Amp. 1M5G I.F. Amp. 1K7G 2nd Det. AVC. 1L5G -WAVE RANGES: 1650 to 550 Ke and 13 to 43 metres. INTERMEDIATE FREQUENCY: 455 Kc. Oscillator frequency is higher than signal frequency on both bands.

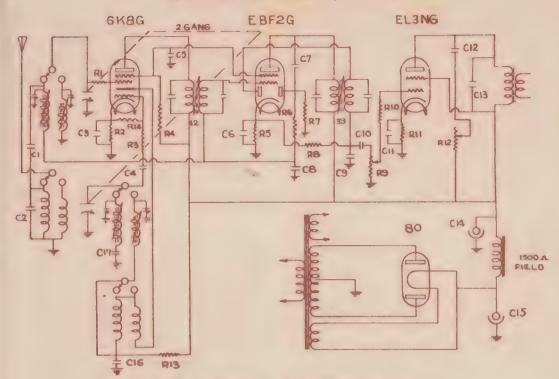
KRIESLER 3K01 & 3K03

VALVES: 6K8G Converter. EBF2G I.F. Amp. 2nd Det & AVC. EL3NG Output. 90 Rect. WAVE RANGES: 1650 to 550 Kc and 13 to 43 metres. I.F. 455 Kc. Osc. frequency is higher than signal frequency on both bands.

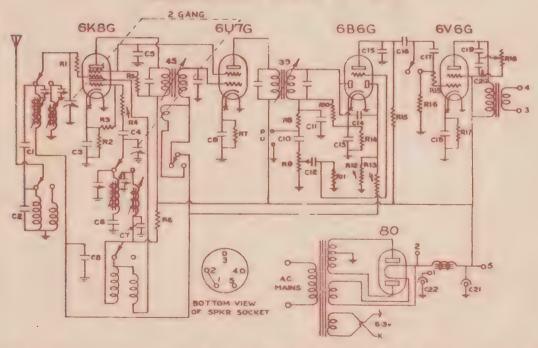
D.C. VOLTAGE USING 1000 OHMS P/V METER

Plate	6K8G 250	250	EL3NG 240	80	METER SCALE
Screen	110	110	250		250 + 1000
Osc. Plate	105 3.5	3.5	6		250 10
Cathode Bias Filament A.C.	6.3	6.3	6.3	5	10
Speaker 1500 ohms field					
R1 & 3- 50 ohm W R9 & 12- 1 m		C4 -00005		C11 -	25 mfd
R2 -350 ohms lW R11- 160 ohm R4,10&14-20000 lW R13-40000 lW		061 200V 07 -00001			.05mfd Cl3-005
RE -300 ohms lW C1 -000005		081 SOOV		C15-	16 mfd 8 mfd
R6 & 7-1 meg. 1W 03 - 5005 R8 - \frac{1}{2} meg. 1W 03 &51 20		09 -00025 Clo01		C16-	

KRIESLER 3K01 & 3K03 (Continued)



KRIESLER 3K02 & 3K05



VALVES: 6K8G Converter. 5U7G I.F. Amp. 686G 2nd Det. A.V.G. Driver. 6V6G - Output. 80 Rectifier. NAVE RANGES: 1650 to 550 Kc and 13 to 43 metres. I.F. 455 Kc. Osc. frequency is higher than signal frequency on both bands.

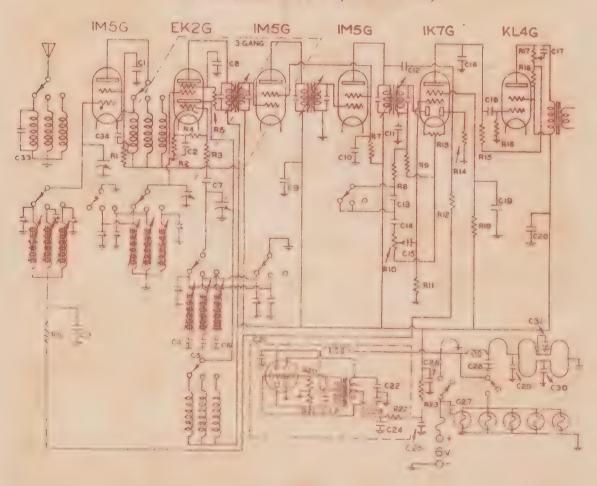
KRIESLER 3K02 & 3K05 (Continued)

Gl	000005mfd	C1201 mfd	R1 - 50 ohms W	R12- 1 megohm lW'
C2	0005 mfd	C13- 25mfd 40	R2 - 300 ohms 1W	Rl3- 1 megohm lW
C3	lmfd	01400005 mfd	R305 megohm lW	R14- 3000 ohm 1W
C4	0001 mfd	C1500025 mfd	R4 - 50 ohms W	25megohm 17
~	lmfd 400	C1601 mfd	R502 megohm lW	R165 megohm lW
-	- 415 mm fd	C170005	R604 meg .hm liv	R17- 250 ohm
	0085mfd	C18- 25 mfd 40	R7 - 600 obms lw	R185 megohm
	lmfd 400	C1905 mfd	R805 megohm 1W	pot.
-	lmfd 200	020505 mfd	R95 megohm pot.	R1905 megohm 1W
	02 mfd	C21- 16 mfd	R105 megohm lW	
GII	100025mfd	C22-8 mfd	R11- 1 megohm lW	

D.C. VOLTAGE USING 1000 OHMS P/V METER

	SK8G	6U7G	6B6G	6V 6Q	80 M	ETER SCALE U	BED
Plate	250	250	100	240		1000	
Screen	110	110		250	2	50 + 1000	
Oso. plate	105					250	
Cathode Bias	3.5	2.5	1	12.5		10 + 50	
Filament A.C.	6.3	6.3	6.3	6.3	5	10	
Speaker 1500 ohms field							

KRIESLER XP (Vibrator)



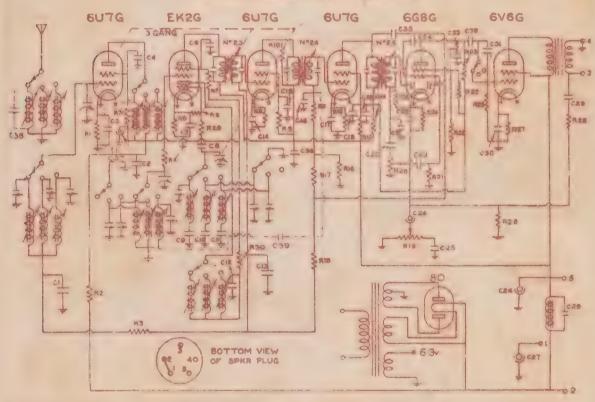
KRIESLER XP VIBRATOR (Continued)

C1,02,08,C10 & C19- C14,C18,C22 & C23-R2 - 400 ohm .01 600 .1 400 R3 - 50 ohm 03 - .05 200 R4 - 20,000 ohm 020- .5 400 34 - .00106 mfd R5 - 75500 ohm 021,029,030 & 031-15 - .0029 mfd R6 & R8 - .05 06 & C9 -.005 mfd megohm 97 - 70 mm fd C24-C25- 24 mfd R7,R9 & R15- .25 011,016- .00025 026- 16 mfd magolm 012- .000025 027- .1 200 R10,R17- .5 meg-013- .001 028- 500 mfd

R1 - .1 megohm

R13- 600 ohm C.T. R16- .5 megohm R18- 10000 arm R19- 1.5 megohm R20,R21,R22,R23-250 ohm 032-.1 400 C33-.0005 XPVB only 034- .00002 " N11, k12, R14-lmegohm 04 - Changed to 415 mm fd

KRIESLER XP (A.C.)



01,02,012,013- .05 C19,C22,C25 & C29 & C36- .5 R3 - .075 megohm R19- 1000 ohm pot. 03,04,07,014 & C17-R4 - 50 ohm R20- .5 megohm pot. 021- .00025 024- 24 mfd R6 - .02 mogoba RC5,R18,R21- 1 megohm c6,C15,C16,C18 & C33-R7 - .1 megohm 827,329-250 ohm 828-1500 ohm C26- 16 mrd R8.R24- 2000 ohm 05,027-8 mfd R9, R11, R13, R16, R30-.04 megorm R17 & F06-5 meg R31-.15 megorm R10, R15, R23-E22-5 megorm 029,032-.1400 18 - 70mm fd 030- 35 mfd 30100. - 95 G51- .00% 622 - .5 Degotes 637 - .30005 XPB only 010- .0029 93% & \$35-.000025 C11- .005 R12- 5000 orum R2 K5 - 400 olims C38- .0005 C20.C23- .O2 R2 - 10000 ohms 5W R14- .01 'C39- 415



News of the month, trade and technical topics, personal and association news—the "Queensland Electrical and Radio World" keeps you abreast with what's happening in the industry.

It's officially endorsed by the Electrical and Radio Federation, the Australian Trained Radio Service Institute, and the Electrical Contractors' Association. Available by subscription only: 7/6 per year, post free.

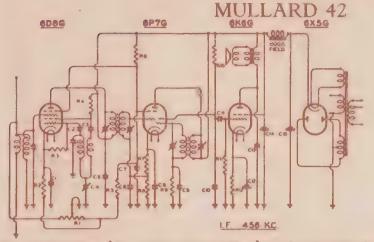
Published by

The Strand Press

T. & G. Building, Queen Street, BRISBANE

MULLARD RADIO

Manufactured by Mullard (Aust.) Pty. Ltd., Sydney, N.S.W.



CAPACITIES

C1 - 0.02 mfd 400V C2 - 100 mmfd mica C3 - 1,000 mmfd mica C4 - 5 plate padder C5 - 0.1 mfd 400V C6 - 0.02 mfd 400V C7 - 0.02 mfd 400V C8 - 0.02 mfd 400V C9 - 0.02 mfd 400V Clo- 250 mmfd mica Cl1- 0.01 mfd 400V C12- 10 mfd 40 V.P. C13- 0.01 mfd 400V C14- 8 mfd 500 V.P. C15- 8 mfd 500 V.P. RESISTANCES R1 - 5,000 ohms V/C R2 - 400 ohms W/W

R3 - 50,000 ohms \W R7 - 500 ohms \W

R4 - 30,000 ohms W R5 - 50,000 ohms W R8 - 4,000 ohms W R9 - 0.5 megohm W R11- 0.5 meg. W R12- 460 ohms W/W

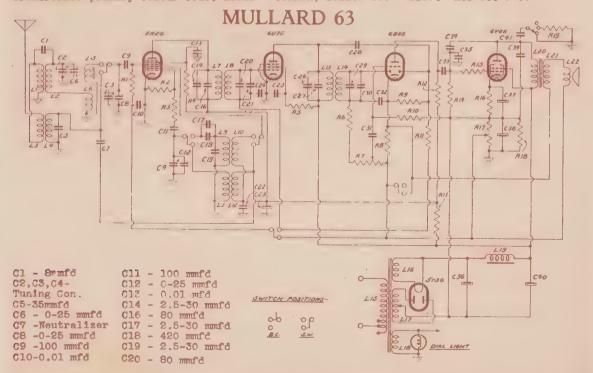
R6 - 15,000 ohms 1W R10- 0.25 meg. 3W

D.C. VOLTAGE AND CURRENT ANALYSIS.

All voltages measured to chassis with 1,000 0.P.V. voltmeter: Volume control full on, line voltage 215 or 240 volts according to transformer tapping used.

VALVE	PLATE	PLATE	SCREEN	SCREEN	OSC.ANODE	BIAS
	VOLTS	mA	VOLTS	mA	VOLTS	VOLTS
6D8G	205	3.0	100	4.3	120	4.5
6P76 (I.F.)	205	3.7	100	1.1	en P	2.5
" (Det.)	130	0.2	-	-	-	20.5
6K6G	190	24	205	4.6	ph.	12.5
6X5G	Output	Voltage	(Cathode-chassis)	280		

Transformer primary colour code: Black - Common; Yellow 200 - 230V. Red 230-250V

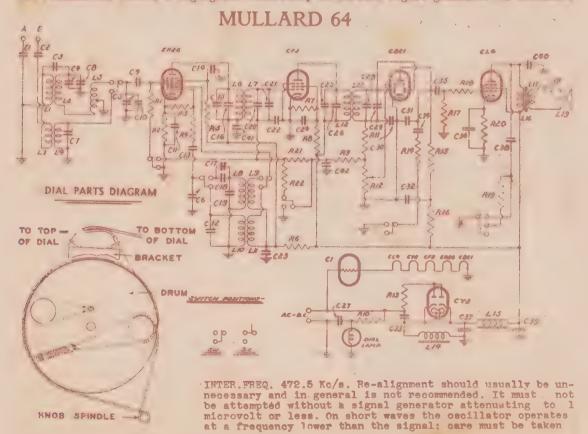


MULLARD 63 (Continued)

C21 - 2.5-30 mmfd C22 - 0.01 mfd C23-8 mfd C24-0.01 mfd C25-0.01 mfd C26-2.5-30 mmfd C27-80 mmfd C28-15 mmfd C29-80 mmfd C30-2.5-30 mmfd C31-0.01 mfd C32-100 mmfd C34-10 mmfd C35-100 mmfd C35-100 mmfd C35-100 mmfd	C36- 16 mfd
R10- 1 megohm R11- 1 megohm R12- 0.25 megohm R13- 10;000 ohms R14- 1 megohm R15- 50,000 ohms R16- 250 ohms R17- 100 125 ohms REMOVAL OF CHASSIS:	R18- 250 ohms R19- 10,000 ohms L5 - 2 ohms L6 - below 1 ohm L13- 7.5 ohms L6 - below 1 ohm RES. OF WINDINGS L7 - 7.5 ohms L8 - 7.5 ohms L8 - 7.5 ohms L19- 1,500 ohms L2 - 3.5 ohms L10- 1.5 ohms L2 - 500 ohms L11- below 1 ohm L11- below 1 ohm L22- 3 ohms Chassis, speaker, dial (except glass scale), and baffle-board are

REMOVAL OF CHASSIS: Chassis, speaker, dial (except glass scale), and baffle-board are constructed as a single unit. After removing control knobs (grub screws of side knobs accessible from inside cabinet) and the fibre back, place receiver on a cloth face downward. Remove the two uppermost screws beside dial lamps, two at bottom of baffle board (beneath chassis) and two at each side (extreme edge of baffle-board). Withdraw chassis vertically by the side-brackets, taking care to clear the two projecting brackets at the bottom rear of the cabinet. Remove dial scale glass before moving cabinet. When replacing screws, use a magnetised screwdriver.

THTERMEDIATE FREQ.: 472.5 Ec/s. Re-alignment should ordinarily be unnecessary, and is not recommended unless a high-grade accurately calibrated signal generator is available.



MULLARD 64 (Continued)

to avoid alignment for the arong image tuning point. Proper dummy semials must be used for both short-wave and broadcast bands.

VALVE ELECTRODE VOLTAGES	C1 - 0.01 mfd	C15- 2.5-30 mmfd
VALVE PLATE SCREEN CATH.	C2 - 0.01 mfd	C16- 80 mard
VOLTS VOLTS VOLTS	C3 - 8 marid	017- 2.5-30 mmfd
EX20 220 (SW- 50) (SW - 2.5)	C4, C5, C6 -Gang	C18- 420 mmfd
(BC- 60) (BC - 2.4)	Tuning cond.	Cl9- 2.5-30 mmfd
(osc. anode 220V)	C7 - 0-35 mm/d	020- 80 mmrd
CF2 245 70 0	08 - 0-25 mmfd	C21- 2.5-30 mmfd
CBC1 25 - 0	C9 - 100 mmfd	C22- 0.01 mfd
CL4 235 245 11	C10- 0-10 mmfd	C25- 0.01 mfd
CY2265	Cll- 0.01 mfd	C24- 0.01 mfd
All voltages measured to chassis wit	th C12- 0-10 mmfd	C25- 2.5-30 mfd
1,000 O.P.V. voltmeter, volume contr		C26- 80 mmfd
off, no signal, 240V. A.C. line volte		C27- 0.01 mfd
C28- 80 mmfd R1 - 1 megohm	R16- 50,000 ohms	L6 - 7.5 ohms
C29- 2.5-30 mmfd R2 - 500 ohms	R17- 0.5 megohm	L7 - 7.5 ohms
C30- 100 mmfd R3 - 50,000 oh	ms R18- 50,000 ohms	L8 - 2.5 ohma
C31- 100 mmfd R4 - 50 ohms	R19- 10,000 ohms	L9 - 1.5 ohms
C32- 0.25 mfd R5 - 0.15 mege	hm R20- 200 ohms	LlO- below 1 ohm
C33- 0.01 mfd R6 - 5,000 ohm	R21- 5 megohms	L11- below 1 ohm
C34- 0.01 mfd R7 - 0.25 mego	hm R22-5 megohms	L12 - 7.5 ohms
C35- 0.01 mfd R8 - 0.1 megoh	m	L13- 7.5 ohms
C36- 25 mfd R9 - 2 megohms	RES. OF WINDINGS	L14- 7,500 ohms
C37- 32 mfd R10- 500 ohms		L15- 250 ohms
C38- 0.02 mfd R11- 50,000 oh		L16- 250 ohms
C39- 32 mfd R12- 0.5 meg.		L17- 1.5 ohms
C40- 0.004 mfd R13- 60 ohms	L3 - below 1 ohm	
641- 0.01 mfd R14-25,000 ohm	s L4 - below 1 ohm	L19- 3 ohms
C42- 0.05 mrd R15-0.25 megoh	ma L5 - 3.5 ohms	

*INTERMEDIATE FREQ. 472.5 Kcs.

REMOVAL OF CHASSIS: Chassis, speaker, dial and baffle-board are constructed as a single unit. After removing control knobs and fibre back, remove the two screws at extreme top of baffle-board (above dial), two at bottom (beneath the chassis) and four at each side (extreme edge). A magnetised screwdriver facilitates re-

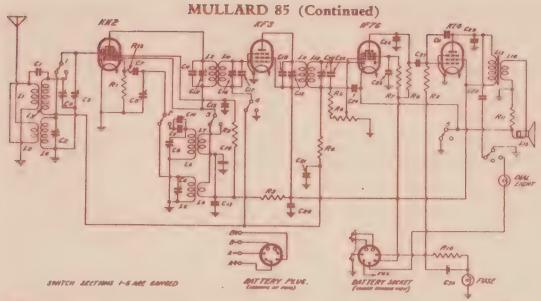
placement of these screws.
DIAL ADJULTATION: If re-threading dial cords, follow diagram in exact detail. To increase tension on metallic cords, slacken brass locknuts at top and bottom ends of flexible tubing (where metallic cord emerges) and turn both threaded nipples anti-clockwise SLICHTLY, then re-tighten locknuts. To raise pointer slightly to correct celibration, proceed as above but turn top adjusting nipple anti-clockwise and bottom nipple clockwise. Reverse above directions of rotation to decrease tension or to lower pointer, respectively.

MULLARD 85

NOTE: This Model operates either from a 2 volt "A" Battery and 135 volt "B", or, in conjunction with fedel 85 Tibrator-Converter, from a single 6 volt battery. In the latter case the battery tebie is discarded and the Vibrator-Converter substituted, the Receiver dial lamp at the same time being changed from 2 volt to 6 volt. Instruction sheet is packed with the Vibrator-Converter.

VALVE	VALVE BLECTRODE PLATE VOLTS SCI			Cl -4mmfd C2 -2.5-30mmfd C3 -Gang cond.	C18-	80 mmfd 80 mmfd 2.5-30mmfd
KK2	120	55	0	C5 -Gang Cond.		O.1 mfd
	(Osc.anode 120V)		C4 -2.5-30mmfd C6 -2.5-30mmfd		0.01 mfd 2.5-30mmfd
KF5	, 130	130	0	C7 -35mmfd		80 mmfd
1F7G	30	20	0	C8 -2.5-30mmfd	_	100 mmfd
KL4	125	130	5.0	. C9 -380mmfd		0.05 mfd
			(Across RlO)	C10-2.5-30mmfd		100 mmfd
A31 vo	Itages ressured to	chassis	with 1,000	Cll-80mmfd		G.Ol mfd
O.P.V.	voltmeter, volume	control	off, no sig-	C12-2.5-30mmfd	0	0.002 mfd
nal, m	abad hittery volta	ges.		Clg-C,Olmfd	Q	0.01 mfd 25 mfd
BATTER	Y CONSUMPTION: "A"	- 0.4A	(lamp off)	C14-32 mfd C15-0.01 mfd		10 mmfd
With V	ibrator-Converter		t 6V.	C16-2.5-30 mmfd	002	S. O. AFRITZ S.

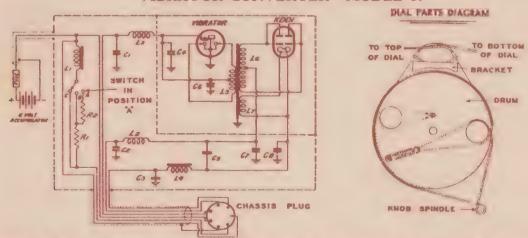
209



RESISTANCE VALUES. R6 - 0.5mog. V/C with R11- 0.275 ohm 1.5 - 4 ohma L10 - 8 ohms L11 - 8 ohms L12 - 8 ohms switch (mounted on LA - below 1 ohm R1 = 50,000 chms R2 = 50,000 chms R3 = 1,000 chms R4 = 2 megchms R7 - 1 megohm 15 - 2 ohms speaker) RESISTANCES OF L13 - 600 ohms L14 - below: 1 ohm R8 - 0.25 megohm L6 - below 1 ohm R9 - 1 megohm WINDINGS. 17 - 3.5 ohms

RS - 1,000 chms RP - 1 megchm WINDINGS. LT - 3.5 chms L14 - below 1 chm R4 - 2 megchms R10- 400 chms L1 - 30 chms L8 - below 1 chm L5 - below 1 chm R5 - 50,000 chms R12- 25 chms L2 - below 1 chm L9 - 8 chms INTERMEDIATE FREQ.: 472.5 KC/s. Re-alignment should usually be unnecessary and in general is not recommended. It must not be attempted without a signal generator attenuating to 1 microvolt or less. On short waves to the osc. operates at a frequency lower than the signal; care must be taken to avoid alignment for the wrong image tuning point. Proper dummy aerials must be used for both short-wave and broadcast bands.

VIBRATOR-CONVERTER—MODEL 85

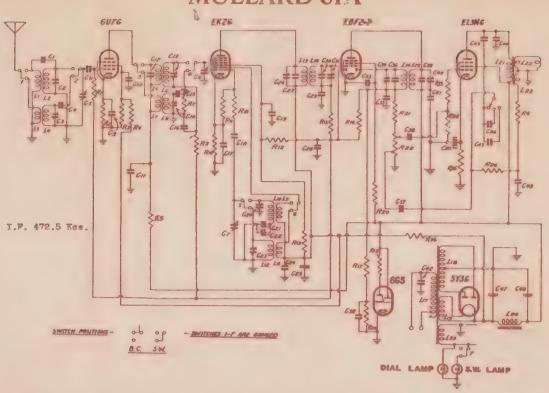


REMOVAL OF CHASSIS: Chassis, speaker, dial and baffle-board are constructed as a single unit. After removing control knobs and fibre back, remove the two screws at extreme top of baffle-board (above dial) two at bottom (beneath the chassis), and four at each side (extreme edge). A magnetised screwdriver facilitates replacement of these screws.

DIAL ADJUSTMENT: If re-threading dial cords, follow diagram in exact detail. To increase tension on metallic cords, slacken brass locknuts at top and bottom ends of flexible tubing (where retailic cord emerges) and turn both threaded nipples anti-clockwise SLIGHTLY, then re-tighten locknuts. To raise pointer slightly to correct calibration, proceed as above but turn top adjusting nipple anti-clockwise and bottom nipple clockwise. Reverse above directions of rotation to decrease tension or to lower pointer, respectively. CAPACITY VALUES.

C1 - lmfd 200V C2 - lmfd 200V C3 - 32mfd 350V C5 - 8mfd 500V RESISTANCE VALUES. C6 - 0.05mfd 200V C7 - 0.05mfd 200V R1 - 2.6 ohma R2 - 1.5 ohma Ll - 6 ohms IA - 250 chms lmfd 200V

MULLARD 61A



C1 - 8 mmfd C2 - 0-30 mmfd C2 - 0-30 mmfd C2 - 0-50 mmfd C3 - 0-50 mmfd C4 - 0.0045 mfd C5 - C6 & C7 - Gang cond. C2 - 0.01 mfd C2 - 0.05 mfd C3 - 0.01 mfd C4 - 0.0045 mfd C5 - C6 & C7 - C27 - 80 mmfd C6 - 100 mmfd C7 - 0.01 mfd C7 - 0.05 mfd C7 - 0.05 mfd C7 - 0.01 mfd C7 - 0.05 mfd	C44- 0.002 mfd C45- 100 mmfd C46- 400 mmfd C47- 8 mfd C48- 16 mfd C48- 16 mfd C49- 0.07 mfd *C50- 25 mfd RESIST. VALUES R1 - 1 megohm R2 - 150 ohm R5 - 30,000 ohm R6 - 25 ohm R7 - 0.5 megohm R8 - 25 ohms R9 - 2 megohm R10- 500 ohm R11- 50,000 ohm R12- 5 megohm	R15- 150,000 ohm R14- 15,000 ohm R14- 15,000 ohm R16- 2 megohm R16- 2 megohm R17- 5 megohm R19- 1 megohm R20- 100,000 ohm R21- 50,000 ohm R22- 0.7 megohm V/c tapped at 35,000 ohm R25- 50,000 ohm R24- 1 megohm R26- 15,000 ohm R26- 15,000 ohm R25- 50,000 ohm R25- 50,000 ohm R25- 50,000 ohm R26- 15,000 ohm R26- 15,000 ohm R26- 15,000 ohm R27- 150 ohm R26- 15,000 ohm R28187.0F WINDINGS L1- 30 ohm L2 - 3.5 ohm L4 - below 1 ohm	L5 - 60 ohms L6 - 3.5 ohms L7 - below 1 ohm L8 - below 1 ohm L10 - 2.5 ohm L11 - below 1 ohm L12 - below 1 ohm L12 - below 1 ohm L13 - 8 ohms L14 - 8 ohms L15 - 8 ohms L15 - 8 ohms L15 - 8 ohms L16 - 50 ohms L17 - 37 ohms L18 - 550 ohms L19 - below 1 ohm L20 - below 1 ohm L21 - 720 ohms L22 - 1 ohm L23 - 46 ohms L24 - 1,500 ohms
--	---	---	--

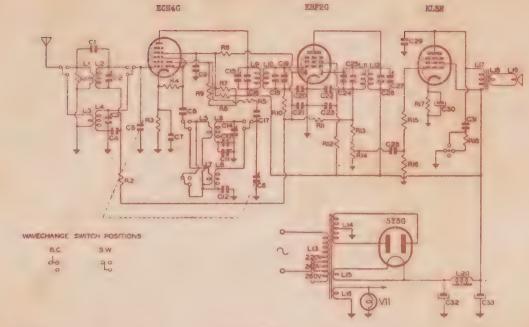
VALVE ELECTPODE VOLTS.

VALVE	PLATE VOLTS SCREEN VOLTS	GRID VOLTS	All voltages measured to chassis with 1,000 O.P.V.
6 U7G	220 85	1.3	voltmeter, volume control off, no signal, rated A.C.
EK2G	190 55	2.1	line voltage.
	(Osc. anode 190V)		# Model 61A receivers having serial numbers lower than
EBFZ	225 70	Ó	7228 do not use self-bias for the output valve; R25
EI 3NG	200 225	5.8	and C50 are omitted and the back bias circuit used
5Y30	300 (A.G., each plate)		as in Model 61 (see previous volume of this Manual).
			- A series and

			IVI	UL	LLAN	LU	02
11 - 8	Annual Control of the	 2.5-30 0.0045		-	100 mfd		C32- C33-

C1 - 8 mmfd C11- 2.5-30 mmfd C22- 100 mmfd C32- 16 mfd 525V R9 - 30,000 o
C2 - 0-25 mmfd C12- 0.045 mfd C23- 0.01 mfd C33- 16 mfd 525V R10- 2 megolum C3 - 0-25 mmfd C14-2.5-30 mmfd C24- 2.5-30 mmfd R1 - 5,000 ohms R11- 2 megolum C4 - 0.05 mfd C15- 2.5-30 mmfd C25- 80 mmfd R2 - 150,000 ohms R12- 100,000 c16- 80 mmfd C26- 80 mmfd R3 - 150 ohms R13- 50,000 ohms C17- 100 mmfd C27- 2.5-30 mmfd R4 - 50,000 ohms R13- 50,000 ohms C7- 0.1 mfd C18- 80 mmfd C28- 0.004 mfd R6 - 100 ohms R15- 50,000 ohms C18- 100 mmfd C19- 2.5-30 mmfd C29- 0.004 mfd R6 - 10 megolum R17- 150 ohms C9- 0.01 mfd C20- 0.01 mfd C30- 25 mfd R7 - 50,000 ohms R17- 150 ohm R17- 150 ohms R18- 10,000 ohms R18- 10,000 ohms R18- 10,000 ohms

MULLARD 65 (Continued)



14 - 2 ohms 15 - 2 ohms 16 - 2.75 ohms 17 - 1.2 ohms 18 - 1 ohm 19 - 7.5 ohms L10- 7.5 ohms L11- 7.5 ohms L12- 7.5 ohms Ll - 30 ohms 117- 500 ohms L2 - 4 ohms L3 - 2.75 ohma L18- 1.2 ohms 1.19- 4 ohma VALVE SLECTRODE VOLTAGES

VALVE PLATE VOLTAGE SCREEN VOLTS CATHODE VOLTS OSC. ANODE V. 90 B.C. ECH4G 220 90 B.C. 0.8 85 S.W. 60 S.W. EBF2G 60 220 5.5 205

All voltages measured to chassis with 1,000 0.P.V. voltmeter; volume central off, no signal, and 240V. line voltage.

INTER. FREQUENCY - 472.5 Ko/s.

(290 R.M.S. per plate; fil. to chassis 315V) REMOVAL OF CHASSIS: Chassis, speaker, dial (except class scale), and baffle-board are constructed as a single unit. After removing control knobs (grub screws of side knobs accessible from instite cabinet) and the fibre back, place receiver on a cloth fuce downward. Pemove the two uppermost screws beside dial large, two at bottom of baffle-board (beneath chassis) and two at each side (extreme edge of baffle-board). Withdraw chassis vertically by the side-brackets, taking care to clear the two projecting brackets at the bottom rear of the cabinet. Remove dial scale glass before moving cabinet. When replacing screws, use a magnetised screw-driver.

MULLARD 66

C1 = 10 mmfd C3 - 25 mmfd C4 - 0.5 mfd C5. C6 - Ganged	C20- 40 mfd C21- 0.01 mfd C22- 0.01 mfd C23- 0.1 mfd	R1 - 50,000 ohms R2 - 25 ohms R3 - 50,000 ohms R4 - 5,000 ohms	L1 - 30 ohms L2 - 3:5 ohms L3 - 2:5 ohms L4 - below 1 ohm
tuning condensers	C24- 2.5-30 mmfd	R5 - 1,000 ohms	L5 - 2 ohm
C7 - 0.05 mfd	C25- 80 mmfd	P6 - 50,000 ohms	L6 - 2.5 ohm
C8 - 100 mmfd	C26- 80 mmfd	R7 - 2 megohms	L7 - below 1 ohm
C9 - 0.01 mfd	C27- 2.5-30 mmfd	R8 - 50,000 ohms	L8 - below 1 ohm
C10- 2.5-30 mmfd	C28- 100 mmfd	R9 - 0.5 meg. V/C	L9 - 7.5 ohms
C11- 340 mmfd	C29- 100 mmfd	with switch	L10- 7.5 ohms
C13- 2.5-30 mmfd	C30- 0.05 mfd	R10- 1 megohm	L11- 7.5 ohms
C14- 0.0035 mfd	C31- 0.01 mfd	R11- 250,000 ohm	L12- 7.5 ohms
C150.05 mfd	C32- 10 mmfd	R12- 1 megohm	L13- 800 ohms
C16- 2.5-30 mmfd	C35- 25 mfd	R13- 400 ohma	L14- below 1 ohm
C17- 80 mmfd	C34- 0.01 mfd	R14- 0.4 ohm (contain-	. L15- 3 ohms
G18- 80 mmfd	C35- 0.002 mfd	ed in the speaker	
C19- 2.5-30 mmfd		assembly)	

VATVR PLATE VOLTS 55 B.C. (osc.anode: - 50 S.W. (125 volts 107G 125 128 1D5GP 1K7G 128 (Grid bias: 6.6 volts) **KT 4**0

BATTERY CONSUMPTION:

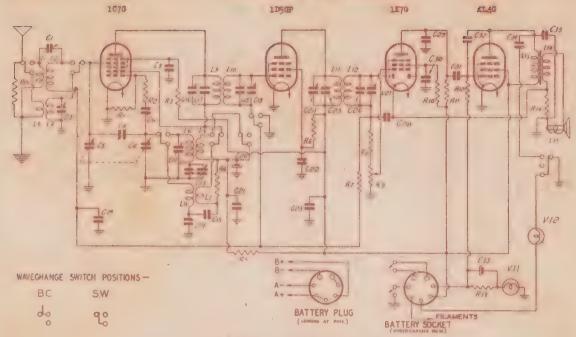
"B" Battery - 15.5 mA (approx.)
"A" Battery (lamp off) 0.44 A (approx.)

VIBRATOR CONVERTER TYPE 85 (see previous pages) may be used in place of "B" batteries. However, the dial lamp should be changed to 6.3V. and the selector switch on the vibrator converter set at position "E" (centre position).

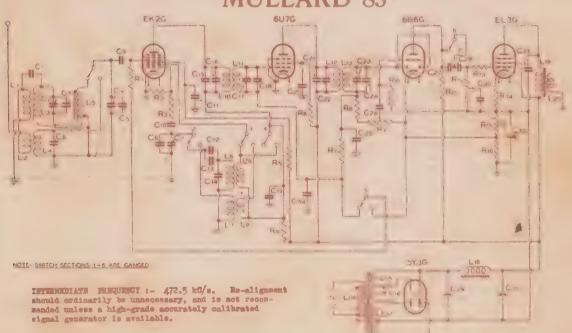
REMOVAL OF CHASSIS: See Model 55.

INTERMEDIATE PREQUENCY: 472.5 Kc/s.

MULLARD 66 (Continued)



ARD



C1 - 8 minfd C2,C3,C4,C5,6,C7 -Gang tuning cond. with trimmers with trimmers C8 - 2.5-30 mmfd O9 - 100 mmfd C10- 100 mmfd C11- 0.01 mfd C12- 2.5-30 mmfd C13- 420 mmfd

C14- 2.5-30 mmfd C15- Part of lat IFF C16- 2.5-30 mmfd C17- 2.5-30 mmfd

C18- Part of 1st I.F.T C19- 0.01 mfd C20- 0.01 mfd C21- Part of 2nd I.F.T.

C22- 2.5-30 mmfd C23- 2.5-30 mmfd C24- Part of 2nd

C24- Part of 21 I.F.T. C25- 100 mmfd C26- 0.01 mfd C27- 0.001 mfd C28- 0.01 mfd C29- 16 mfd C30- 0.006 mfd

334- 0.01 mfd 1 megohm 50,000 ohms 25 ohms 25 ohms
40 - 10,000 ohms
45 - 150,000 ohm
46 - 60,000 ohm

771 - 8 mfd

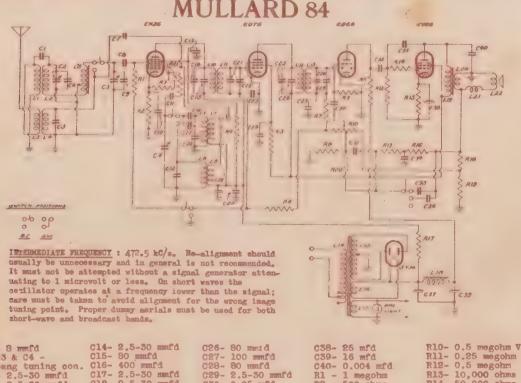
032- 25 mfd 073- 0.004 mfd

P7 -R6 - 50, 01 1219 R9 - 0.5 702 130 U. E. Mer. John -C [[0.25 me som P12- 7.5 mer ohm R13- 50,700 come R14- 150 ohm R15- 100 come T/C

MULLARD 83 (Continued)

```
VALVE PLATE VOLTS SCREEN VOLTS GRID BIAS 55 2.0 (across R16)
                                                                                      L1 - 50 ohms
L2 - below 1 ohm
L5 - 4 ohms
                                                                                                                        L11 - 7.5 ohma
L12 - 7.5 ohms
L13 - 7.5 ohms
                   (osc. anode
                                    SOOA)
6B60
                100
                                                     1.5 (across R15)
                                                                                      IA - below 1 ohm
                                                                                                                        L14 - 60 ohms
                                                                                      L5 - 3.5 ohms
L6 - 2.5 ohms
                                                     5.5 (across R14)
                                                                                                                        L15 - beldw 1 ohm
5Y3G
                300 (R.M.S. A.C. per plate)
                                                                                                                        L16 - below 1 ohm
All voltages (except grid bias) measured to chassis with 1,000 O.P.V. voltmeter, volume control off, no signal, 240V. line voltage.
                                                                                       L7 - below 1 ohm
                                                                                                                        L17 - 600 ohms
                                                                                      L8 - 1.5 ohms
L9 - below 1 ohm
                                                                                                                        L19 - 600 ohms
                                                                                                                        L20 - below 1 ohm
                                                                                      L10- 7.5 ohms
```

REMOVAL OF CHASSIS: Before removing chassis and dial, it is advisable to mark clearly on the lower dial rod the pointer positions corresponding to 1,400, 1,000 and 600 ke/s dial readings; this will facilitate checking should re-alignment be necessary. Care must be taken that the dial cables are not kinked or strained. After re-assembly, any slight adjustment of pointer position may be made by slackening the screw on the pointer carriage and moving the pointer with respect to the part to which the wires are attached. Should the fabric tuning drive cord be replaced, it should make almost two complete turns around the knob spindle.

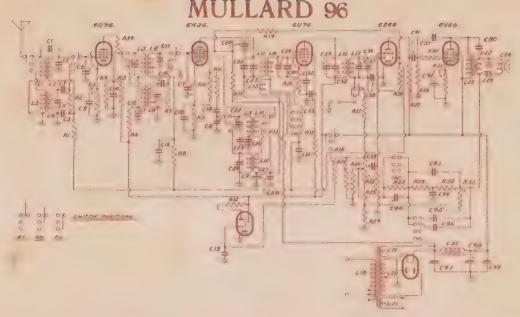


C1 - 8 mmfd C2, C3 & C4 - Geng tuning con. C5 - 2.5-30 mmfd C6 - 2.5-30 mmfd C7 - Neut. C8 - 100 mmfd C9 - 2.5-30 mmfd C10- 0.01 mfd C11- 100 mmfd C12- 2.5-50 mmfd	C17- 2.5-30 mmfd C18- 2.5-30 mmfd C19- 8 mfd C20- 0.01 mfd C21- 80 mmfd C22- 2.5-30 mmfd C23- 0.01 mfd C24- 0.01 mfd	C26- 80 mm1 d C27- 100 mmfd C28- 80 mmfd C29- 2.5-30 mmfd C30- 0.05 mfd C31- 0.1 mfd C32- 0.1 mfd C32- 0.1 mfd C34- 0.05 mfd C35- 0.05 mfd C36- 0.06 mfd	C38- 25 mfd C39- 16 mfd C40- 0.004 mfd R1 - 1 megohm R2 - 500 ohms R3 - 50,000 ohms R4 - 15c,000 ohms R6 - 2 megohms R7 - 50,000 ohms R8 - 10,000 ohms	R10- 0.5 megohm V/C R11- 0.25 megohm R12- 0.5 megohm R13- 10,000 ohms R14- 50,000 ohms R15- 250 ohms R16- 1,000 ohms R17- 25,000 ohms R18- 50 ohms R19- 25 ohms R20- 50,000 ohms
C13- 0.01 mfd	C25- 2.5-30 mmfd	C37- 8 mfd	R9 - 2 megohms	

VALVE	PLATE VOLTS	SCREEN VOLTS	CATHODE VOLTS	
EXSG	200	45	2	All voltages measured with respect
6 07 G	230	85	0	chassis with 1,000 ohm per volt vol
6B6G	80	-	0	meter, volume control off, no sign
6V60	210	250	10	rated line voltage
5Y3G	320 (R.	M.S. A.C. per	plate)	

REMOVAL OF CHASSIS: Before moving chassis and dial, it is advisable to mark clearly on the lower dial rod the pointer positions corresponding to 1,400, 1,000 and 600 kc/s dial readings; this will facilitate checking should re-alignment be necessary. Care must be taken that the dial cables are not kinked or abreined. After re-assembly, any slight adjustment of pointer cition may be made by slackening the screw on the pointer carriage and moving the pointer with respect to the part to which the wires are attached. Should the fabric tuning drive cord be replaced, it should make almost two complete turns around the knob spindle.

lt-



C2 - 2.5-30 mmfd C3 - 0.0045 mfd C4 - 2.5-30 mmfd C5 - 0.05 mfd C6,C7 & C8 - Gang- ed tuning cond. C9 - 0.01 mfd C10- 0.01 mfd C11- 80 mmfd C12- 0.01 mfd C13- 2:5-30 mmfd C14- 0.0045 mfd C15- 2.5-30 mmfd	C19- 0.02 mfd C20- 0.01 mfd C21- 2.5-30 mmfd C22- 2.5-30 mmfd C23- 330 mmfd C24- 2.5-30 mmfd C25- 80 mmfd C26- 2.5-30 mmfd C27- 8 mfd C28- 0.01 mfd C30- 2.5-30 mmfd C30- 2.5-30 mmfd C30- 0.05 mfd C31- 0.05 mfd C32- 0.01 mfd	C41- 0.1 mfd C42- 25 mfd C43- 0.001 mfd C44- 0.07 mfd C45- 0.02 mfd C46- 0.01 mfd C47- 16 mfd C48- 16 mfd C49- 16 mfd	R2 - 0.5 megohm R3 - 200 ohms R4 - 30,000 ohms R5 - 25,000 ohms R6 - 1,000 ohms R7 - 0.5 megohm R8 - 2 megohms R9 - 500 ohms R10- 50,000 ohms R11- 25 ohms R12- 5 megohms R13- 0.15 megohms R14- 10 megohms R15- 25,000 ohms	R19- 0.25 megohms R20- 10,000 ohms R21- 0.25 megohm R22- 0.5 megohm V/C with switch R25- 2 megohms R25- 50,000 ohms R26- 2 megohms R27- 0.25 megohms R28- 0.5 megohm R29- 10,000 ohms R30- 50,000 ohms R31- 250 ohms
C15- 2.5-30 mmfd				
C17- 0.01 mfd	C34- 2.5-30 mmfd C35- 80 mmfd	C51- 25 mmfd R1 - O.1 megohm	R17- 60,000 ohms R18- 0.5 megohms	R33- 50 ohms R34- 25 ohms

		AR RUBGLHOOR AOF			
VALVE	PLATE VOLTAGE	SCREEN VOLTAGE		OSC. ANODE V.	All voltages measured to chas-
607G	220	98	1.75		sis with 1,000 O.P.V. voltmet-
EK2G	190	65	2.5	190	er, volume control off, no
6070	220	95	1.75	-	signal, and 240V. line voltage.
6B6G	75	-	_	_	INTER. FREQUENCY - 472.5 Kc/s.
6V60	200	225	10	- ,	REMOVAL OF CHASSIS. See Model
5Y3G	310- (R.	M.S. A.C. per pl	ate)		84.

MULLARD 44

CAPACITY VALUES

C1 - 0.05 mfd C2 - padding cond- enser C3 - 0.001 mfd C4 - 0.05 mfd	C5 - 0.05 mfd C6 - 0.3 mfa C7 - 100 mmfd C8 - 0.01 mfd C9 - 250 mmfd	Clo- 0.01 mfd Cll 8 mfd Cl2- 0.004 mfd R1 - 10,000 chms R2 - 50,000 chms	R3 - 0.25 megohm R4 - 2 megohm R5 - 1 megohm R6 - 0.5 megohm R7 - 0.1 megohm	RS - 0.5 megohm R9 - 0.5 megohm V/C with switch R10- 1 megohm R11- 600 ohms R12- 0.3 ohms
---	--	--	--	--

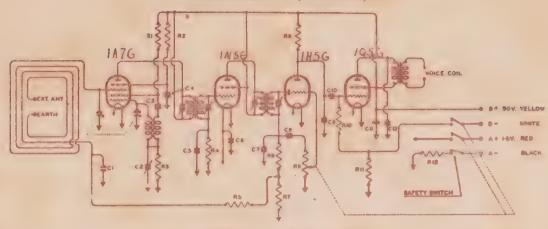
VALVE ELECTRODE VOLTAGES

VALVE PLATE VOLTAGE SCREEN VOLTAGE GRID BIAS VOLTAGE OSC. ANODE VOLTS

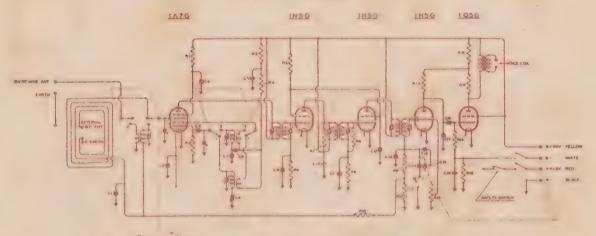
1A7G	83	38	0	70	All voltages measured to chas-
1N5G	83	83	0	-	sis with 1000 O.O.V. voltmeter
1H5G	32		G	eh.	no signal and batteries at
1956	40	. 83	-6.5	-	rated voltage.

BATTERY CONSUMPTION: "A" battery 0.25A. "B" battery 10 mA. INTERERDIATE FREQUENCY: 456 Kc/s

MULLARD 44 (Continued)



MULLARD 68



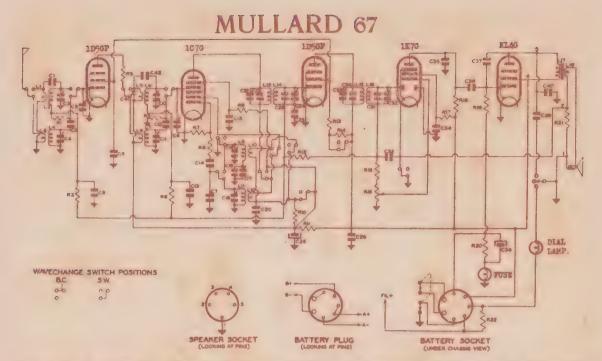
214.14472	SWITCH ROSELIONS	I SECUCION ISE DIRECT	CLEOR.
R1 - 50,000 ohm R2 - 0.25 meg. R3 - 5,000 ohm R4 - 5,000 ohm R5 - 0.1 meg. R6 - 2 megohm R7 - 0.1 meg. R8 - 0.1 meg. R9 - 2 megohm R10 - 1 megohm	Rll- 0.5 meg. Rl2- 0.1 meg. Rl3- 0.5 meg. V/C with switch Rl4- 0.5 meg. Rl5- 1 megohm Rl6- 50,000 obm Rl7- 0.25 meg. Rl8- 600 obms	C1 - 0.05 mfd C2 - 0.25 mfd C3 - 100 mmfd C4 - 0.05 mfd C5 - 8 mfd C6 - 0.002 mfd C7 - 0.0033 mfd C8 - pad . cond . C9 - 0.05 mfd C10 - 8 mfd	C11- 0.05 mfd C12- 0.05 mfd C13- 100 mmrd C14- 0.001 mfd C16- 0.001 mfd C16- 0.01 mfd C17- 150 mmfd C18- 0.31 mfd C19- 25 mf1

VALVE ELECTRODE VOLTAGES

VALVE	PLATE VOLTAGE	SCREEN VOLTAGE	ORC.ANOPE VOLTAGE	GRID BIAS VOIA3
3A7G	83	38	70	0
IN5G	83	50	-	0
1115G	83	50	AD .	0
1H5G	35	_	60	0
1950	80	83	_	-7

all voltages measured to chassis with 1000 0.PV. voltmeter, no signal and batteries at rated voltage

BATTERY CONSUMPTION: "A" battery U.Sa "B" battery 11 mA. LYTER. FFEQ.: 458 Kc.



INTERMEDIATE PREQUENCY: 472.5 Kc/s. The factory alignment is permanent and should not be altered unless coils or tuning condensers have been replaced. Re-alignment should not be attempted without a signal generator attempting to 1 microvolt or less. On short waves the oscillator operates at a frequency lower than the signal; care must be taken to avoid alignment for the wrong image tuning point. Standard dummy aerials must be used for both short-wave and broadcast bands.

C1 - 8 mmfd
C16- 2.5-30 mmfd 033- 100 mmfd R8 - 100 ohms L1 - 35 ohms L18- below 1 ohm

VALVE 1D5GP (R.F.) 107G	PLATE VOLTS 120 120 0sg. anode V.	SCREEN VOLTS GRID BIAS 50 50 B/C, 70; S/W, 116	All voltages measured to chassis with 1,000 0.P.V. voltmeter, volume control off, no signal, and batteries at rated
1D5GP (I.F.) 1K7G KL4G	130 25 125	56 25 130 -5.5 B/C -7 S/W	voltage. BATTERY CONSUMP.(approx.) "B" Battery - 13 mA B/O 16.5 mA S/W. "A" Battery (lamp off) 0.5A

VIBRATOR CONVERTER type 62 or 62A may be used in place of "B" batteries. However, the dial lamp should be changed to 6.3V. and the selector switch on the vibrator converter set at position "B" (centre position).

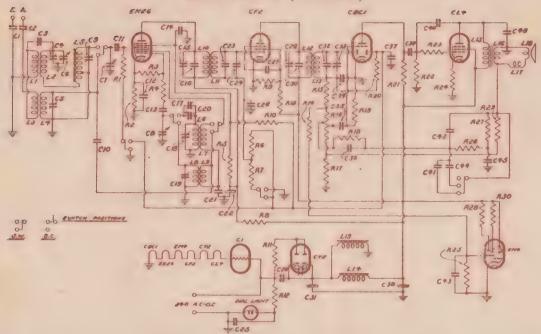
MULLARD 86

VALVE BLECTRODE VOLTAGES

VALVE	PLATE VOLTS	SCREEN VOLTS	CATHODE VOLTS
EKZG	175	2 45	2
CPS CBC1 CL4	(Ose. anode voltage 255 35 239	255	0 0

All voltages measured to chassis with 1,000 O.P.V. voltmeter, volume control off, no signal, and 240V. A.O., line voltage.

MULLARD 86 (Continued)

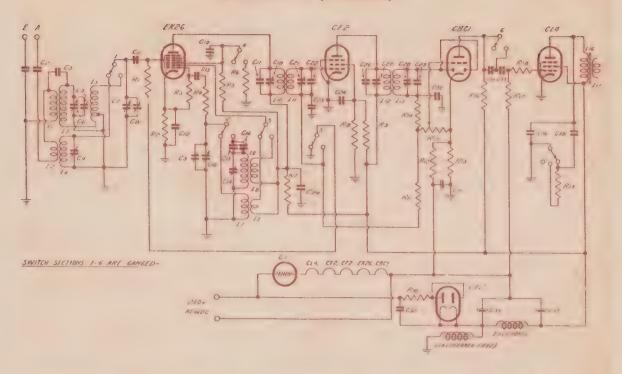


INTERMEDIATE FREQUENCY: 472.5 Kc/s. The factory alignment is permanent and should not be altered unless coils or tuning condensers have been replaced. Re-alignment should not be attempted without a signal generator attenuating to 1 microvolt or less. On short waves the oscillator operates at a frequency lower than the signal; care must be taken to avoid alignment for the grong image tuning point. Standard dummy aerials must be used for both short-wave and broadcast bands.

MULLARD 87

C1 - 0.01 mfd	C17- 80 mmfd	C34- 0.001 mfd	R9 - 0.1 megohm	L2 - below 1 ohm
C2 - 0.01 mfd	C18- 2.5-30 mm fd	035- 0.01 mfd	R10- 60 ohms	L3 - 4 ohms
C3 - 8 mfd	C19- 0.01 mfd	C36- 0.004 mfd	Rll- 1 megohm	L4 - below 1 obm
C4 - 2.5-30 mm fd	C20-0.01 mfd	C37- 32 mfd	R12- 180 ohms	L5 - 3 5 ohms
C6)- Ganged	C21- 2.5-30 mmfd	C38- 0.02 mfd	R13- 12 ohma	L6 - 2.5 ohms
C7)- Tuning	C22- 80 mmfd	C39- 0.01 mfd	R14- 50.000 ohma	L7 - below 1 ohm
ClO)-Condensers	C23- 0.01 mfd	(across dial	R15- 0.5 megohm V/C	L8 - below 1 ohm
C5)- Trimmers on	C24- 0.01 mfd	lamp)	R16- 0.25 megohm	L9 - below 1 ohm
C8)- Tuning gang	C26- 80 mmfd	R1 - 1 megohm	R17- 1 megohm	L10 - 7.5 ohms
C9 - 2.5-30 mmfd	C27- 2.5-30 mmfd	R2 - 500 ohms	R18- 50,000 ohm	Lll- 7.5 ohms
C11- 100 mmfd	C28- 2.5-30 mm fd	R3 - 50,000 ohms	R19- 10,000 ohms	L12- 7.5 ohms
C12- 0.01 mfd	C29- 80 mm fd	R4 - 50 obms	R20- 500 ohms (in	L13- 7.5 ohms
C15- 100 mmfd	C30- 100 mmfd	R5 - 60,000 ohms	dial lamp leads)	L14- 7.500 ohms
C14- 2.5-30 mmfd	C31- 25 mfd	R6 - 50,000 ohms	R21- 500 ohms (in	L15- 250 ohms
C15- 400 mmfd	C32- 0.01 mfd	R7 - 5,000 ohms	dial lamp leads)	220 100 01210
C16- 2.5-30 mm fd	C33- 32 mfd	R8 - 0.25 megohm	Ll- 30 ohms	

MULLARD 87 (Continued)



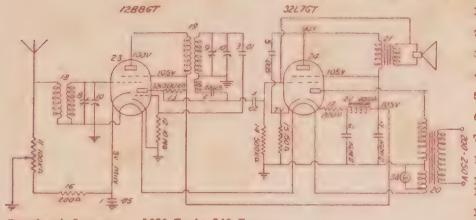
INTERMEDIATE FREQUENCY: 472.5 Kc/s. The factory alignment is permanent and should not be altered unless coils or tuning condensers have been replaced Re-alignment should not be attempted without a signal generator attenuating to 1 microvolt or less. On short waves the oscillator operates at a frequency lower than the signal; care must be taken to avoid alignment for the wrong image tuning point. Standard dummy aerials must be used for both short-wave and broadcast bands.

VALVE BLECTRODE VOLTAGES

VALVE	PLATE VOLTAGE	SCREEN VOLTAGE	GRID BIAS VOLTS	
EK2G (B/C) (S/4)		100 60	3 (across R2)	All woltages, except grid bias, measured to chassis with 1,000
	Osc. anode vol	tage: 200		O.P.V. voltmeter, volume cont-
CF2	240	1 80	1 (Across R13)	rol off, no signal, 240V. A.C.
CBC1	20	-	0 .	line voltage
CL4 ·	225	240	10 (Across C31)	

REMOVAL OF CHASSIS: Before removing chassis and dial, it is advisable to mark clearly on the lower dial rod the pointer positions corresponding to 1,400, 1,000 and 600 Kc/s dial readings; this will facilitate checking should re-alignment be necessary. Orre must be taken that the dial cables are not kinked or strained. After re-assembly, any slight adjustment of pointer position may be made by slackening the screw on the pointer carriage and moving the pointer with respect to the part to which the wires are attached. Should the fabric tuning drive cord be replaced, it should make almost two complete turns around the knob spindle.

MONARCH RADIO MONARCH MINOR A.R.K.

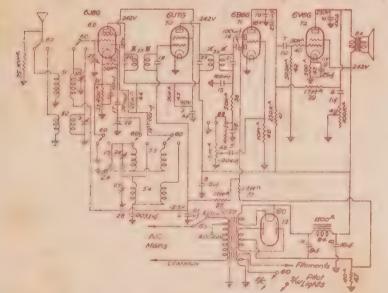


Broadcast Coverage - 1650 Ke to 540 Ke.
Voltages taken with 1000 ohm per volt meter.
LINE VOLTAGE: The Powersupply of this receiver is so designed that no adjustment is necessary for mains voltages between 200V and 250V.

1. .Obmf pap.Con. 2007

- .00025mfd mica
- Cond. 1000V .Olmfd pap.
- Con. 400V .02mfd pap.
- Con. 400V .005mfd pap. Con.600V
- 6. 16mfd elec. con.EEC916 350VP 7. 16mfd elec.
- con.ET1043 350VP 11. 100,000 ohm Vol.Control 12. 10 meg.Res.1W
- 13.500,000 ohm Res. & Watt 14. 500,000 ohm
- Res. & Watt 15. 150 ohm &W 16. 200 ohm &W
- 17. 200 ohm W/W

354 and 654 C.L.



- 22. .00005mf mica Con. 1000V 24. B/cast series Pad
- 25. 20mmf W/W Cond. 26. B/Cast Osc. trim. 27. S/W Osc. trim.
- 28. .0031 Pad. S/W 29. 2 gang condenser 30. Ceramic trim. B/C
- 31. Ceramic trim. S/W
- 33. 400 ohm Carbon Resistor WW
- 34. 50,000 ohm Carbon Resistoraw 10000 ohm Car-
- 36, 50000 ohm carbon resistoraw
- 1.75 meg. Carbon resistor W
- 38. 1.75 megohm Carbon resis. 1w 39. 1.75 megohm
- Carbon resis. lw 40. 50000 ohm Carbon Resis JW bon Resistor aw
 - 250000 ohm Carbon resis. 19 42. 500000 ohm
- Carbon resis. 3w INTERMEDIATE PREQ.: 455 Kc. Broadcast Coverage: 1650 Kc. to 540 Kc. Short Wave Coverage: 22.25 mc. to 6.8 mc. All voltages taken with 1000 ohm per volt meter. Wo signal.

- 1. .05mf paper Con.200V 2. .05mf
- 3. .lmf paper Con.400V
 4. .lmf paper Con. 600V
 5. .004mf pap.Con. 600V
- 6. .002mf
- 7. .02mf pap.con, 400V 8. .5mf pap.con. 400V 25mf elec.Con.ET718
- 40 VP 16mf elec. Cond. EEC973 525VP
- 11. 8mf elec. Cond. EE0849 525VP
- 13. .001 mica Con.1000V
- 14. .0001 "
- 15. .0001 " 16. .0001 "
- 17. .00005 " 18. .00025mf mica Con. 1000V
- .00005mf mica con. 1000V
- .000lmf mica Cond. 1000V
- .0001mf mica Cond. 1000V
- 43. 300 ohm Carbon Res. 20000 ohm Carbon
- Resistor 1 Watt 30000 ohm Carbon Resistor 1 Watt
- 10 meg.Carbon Res." 47. 40 ohm W/W Res. 3W
- 100000 ohm Tone 48. Control 49. ½ meg. Volume Con.

MONARCH 364A & 664A C.M. & C.M.R.

These models are designed for operation from 200V to 250V. 40-60 cycle A-C Electric supply mains..

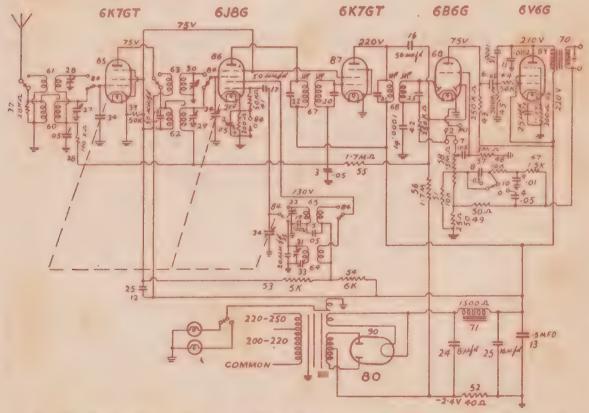
ACCOUSTINATOR. The Accoustinator control is incorporated in these models. This control gives three entirely different conditions of audio response and does not merely out the high notes as with an ordinary tone control. The three positions are as follows:-

1. VOICE. (Left hand position - anti-clockwise). In this position the bass notes are reduced, while the highs are accentuated slightly to give

maximum intelligibility while listening to Plays, Talks, etc.

2. MUSIC. (Centre position). In the "music" position the high notes and low notes are accentuated progressively as the volume control is turned to lower volume. This makes the music clear and natural at very low volume levels.

3. OVERSEAS. (Right hand position). The effect in this position is two fold. Firstly the extreme high notes are reduced to prevent excessive noise and interference, and secondly the extreme low notes are reduced to give maximum intelligibility.



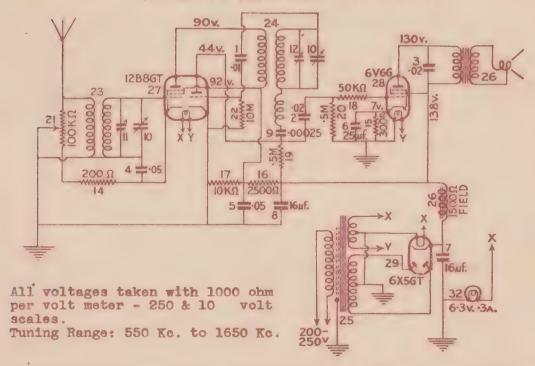
- 1: .05mfd paper Cond .200V 7. .05mfd pap.Cond .400V 2. .05mfd " " 8. .03mfd pap. " 200V 3. .05mfd " " 9. .01mfd " " 600V
- 4. .05mfd " " " 10.
- 5. .05mfd " " 11..002mfd pap.Cond 6. .05mfd " " 400V 600V
- 12. .25mfd paper con.
- 13. .5mfd pap.oon.
- 14. .0001mfd mica Con .1000V

MONARCH 364A & 664A C.M. & C.M.R. (Continued)

15.	0001mfd Mica Con.	23000lmfd Silver	43. 250,000 ohm Res. W
	1000V	mica con. 1000V	44. 50,000 ohm " "
16.	.00005mfd mica	24. 8mfd elec.Cond.	45. 500,000 ohm " "
	Con. 1000V	type ET1015 525PV	46. 300 ohm Res. 3W
3.77	.COOO5mfd mica		
11.		25. 16mfd elec.con:	47. 1,500 ohm Res. W
	Con. 1000V	type EEC973 525PV	48. 10,000 ohm Res. W
18.	.00005mfd mica	26. 25mfd elec.con.	49. 50 ohm Res. 3W
	Con. 1000V	type ET718 40PV	50. 25 ohm Res. 3W
20			
TA.	.003lmfd mica	34.3 Gang Tun.Cond.	51. 10,000 ohm Res. W
	Con. 1000V	35. 20mmfd Bifilar	52. 40 ohm Res. 3W
20.	.00005mfd Silver	Condenser	53. 5,000 ohm Res. 1W
	mica cond.1000V	37. 20,000 ohm Res. W	54. 6,000 ohm " "
21	.00005mfd Silver	38.100,000 " " "	55. 1.7 meg. Res. ½W
ويطره		39. 50 000 " " "	EC 7 7 mog. 1105. 211
	mica con. 1000V	00,000	56. 1.7 meg. " "
22.	.0001mfd Silver	40. 300 ohm " "	57. 3 meg. Res. 3W
	mica con. 1000V	41. 50,000 ohm " "	58. 500,000 ohm Vol-
		42.250,000 ohm " "	ume Control Tapped
			amo consict tapped

INTERMEDIATE FREQUENCY - 455 Kc. Broadcast Coverage is from 1620 Kc. Short Wave Coverage is from 22.00 mc. to .7 mc. to 540 Kc. All voltages taken with 1000 ohms per volt meter. 250V & 10V scale. No signal.

MONARCH BR MINOR

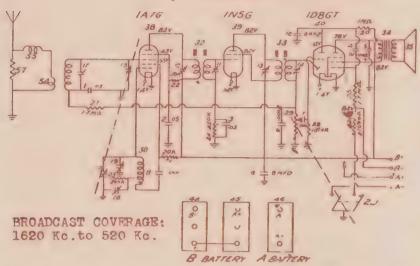


2.	.02mfd	pap.Con. pap.Con. pap.Con. pap.Con.	400V 400V	7.16mfd 8.16mfd		17.10,000 ohm Carb.Res. 1 Wat 18.50,000 ohm Carbon Res.
5.	.05mfd	pap.Con. pap.Con. n Carb.Res	400V	15.300 ohm	Carb.Res. W	a Watt

MONARCH BR MINOR (Continued)

19. 500.000 ohm Carb. 20. 500.000 ohm 21.100.000 ohm Volume Control Res. & Watt Carb.Res. W 22.10 megohm Carbon Res. 1 Watt 26. K5 Speaker 1500 ohm field 7000 ohm input LINE VOLTAGE: The power supply of this receiver is so designed that no adjustment is necessary for mains voltages between 200V and 260V. BROADCAST COVERAGE: 1650 Kc. to 540 Kc.

MONARCH 034 B.S.



- 1. .05mf pap. Con. 200V
- 2. .05mf paper Con.200V
- .05mf paper Con.200V
- .Olmf paper Con. SOOV
- 5. .002mf paper Con. 600V
- 6. 8mf dry elect. Con.ET1015 525PV
- 7. .001mf mica Con. 1000V
- 8. .001mf mica Con. 1000V
- 9. .0002mf mica Con. 1000V

- 10. .0002mf mica Cond. 1000V
- 20. 1 meg. Res. 3W
- 21. 20,000 ohm Res. 5 Watt
- 22. 40,000 ohm Res. W 23. 200.000 Jhm Res.
 - Watt
- 24. 250,000 ohm Res. 2W 25. 1.7 meg.Res. W
- 57. 2000 ohm Res. W
- 26. 1000 ohm Res. WW
- 27. 1.7 meg.Res. 28. 10 meg.Res. 1W
- 29. 1 meg. Vol. Cont. DPST Switch

INTERMEDIATE PREQUENCY: 455 K.C. All voltages taken to earth with 1000 ohm per volt meter 250 and lov scale. The batteries used are: - 2 - P45 or equivalent 45 volt "B" batteries. 1- Pl.5 or equivalent 1.5 wolt dry cell "A" battery.

MONARCH 554 B.L.

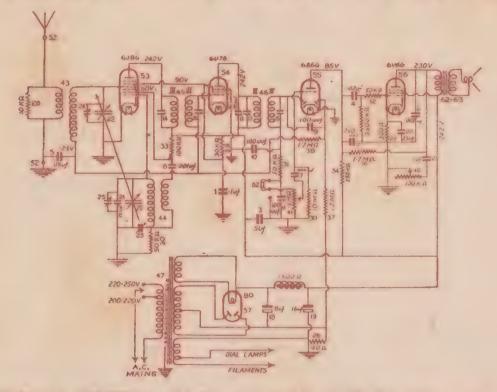
- 1. .lmfd pap.con.400V
- 2. .lmfd pap.con.600V
- 3. .5mfd pap.con.400V
- 4. .02mfd pap.con.400V
- 5. .05mfd pap.con.200V
- 6. .002mfd pap.con. 600V
- 7. .004mfd pap.con. 600V
- 8. .001mfd mica cond. 1000V
- 9. .000lmfd mica Cond. 1000V

- 10..0001mfd mica Con. 1000V
- 11..0001mfd mica con. 10000
- 12..00025mfd mica con. 1000V
- 13..0000lmfd silver mica con. 1000V
- 14..000lmfd silver mica con. 1000V
- 15..000lmfd silver mica con.1000V

- 16..00005mfd silver mica con. 1000V
- 17. .00005mfd silver mica con. 1000V
- 18. 8mfd elec.con. EE0849 525VP
- 19. 16mfd elec.cond. (EEC973) 525VP
- 20.25mfd elect Condens. (ET718) 40VP
- 21. 20mmfd W/W Cond.
- 22. 2 gang var. cond. 26. 40 ohm W/W Res. 3W

MONARCH 534 B.L. (Continued)

27. 300 ohm Res.IW 32. 50,000 ohm Res. W 37.1.75 meg.Res. Watt 28. 10,000 ohm Res. W 33. 100,000 ohm Res. W 38.1.75 meg.Res. Watt 29. 30,000 ohm Res. W 34. 250,000 ohm Res. W 39. 10 meg.Res. 1 Watt 30. 50,000 ohm Res. W 35. 500,000 ohm Res. W 40.100,000 ohm Tone Con 31. 50,000 ohm Res. W 36. 1.75 meg.Res. W 41. .5 meg.Vol.Cont.



INTERMEDIATE FREQUENCY: 455 Kc. BROADCAST COVERAGE: 1620 to 540 Kc. This Receiver is designed for operation from 200V to 250V. 40-60 cycle A.C. electric supply mains.

PHONO PICK-UP CONNECTIONS: An inspection of the back of the chassis will reveal three plug sockets under the marking "Phono Pick-up". When the receiver is used on Radio, the middle and left hand sockets under "R" are connected by means of the Pick-up shorting bar. To connect the Phono Pick-up, remove the shorting bar and connect the pick-up leads to the middle and right hand sockets under "P".

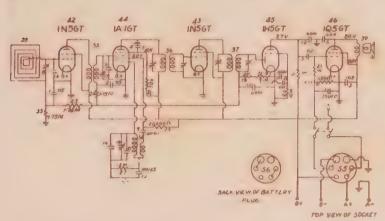
If a single shielded lead is used from the pick-up, connect the lead to the centre socket and the shielding braid to the right hand socket. If it so happens that two leads are used on the pick-up, connect the active lead to the centre socket, the earth lead to the right hand socket and the shielding braid, if any, to the chassis earth. The volume control and tone control both control the reproduction on Phono pick-up in exactly the same manner as on Radio.

MONARCH "DE LUXE" PORTABLE CJ

INSTRUCTIONS FOR CHANGING DIAL READINGS:- 1. Remove Push-on tuning knob by pulling straight out. 2. Remove two screws holding Escutcheon ring. 3. Remove Escutcheon, Celluloid. and Dial Reading. 4. Select desired State Dial reading. 5. Place screws into Escutcheon, then place

MONARCH "DE LUXE" PORTABLE CJ (Continued)

Celluloid on screws at the back, then the Dial reading with lettering towards the Celluloid. 6. Place Escutcheon, Celluloid, and Dial Reading assembly into position making sure that the top side of the Dial is toward the top of the cabinet. 7. Tighten down screws, holding all parts into position. 8. Replace tuning knob. The spring in the knob rust correspond to the flat on the shaft. Push in as far as possible. 9. The receiver is now ready to operate and the pointer on the will indicate the station to which the set is tuned.



- 1. .05mfd pap.Con.200V
- 2. .05mfd pap.Con.200V
- 3. .05mfd pap.con.200V
- 4. .lmfd pap.con.200V
- 5. .02mfd pap.con.400V 6. .004mfd pap.con.600V
- 7. 25mfd elec.Cond.
- (ET718) 40VP
- 9. .0001mfd mica Cond. 1000V
- 10..0001mfd mica Cond. 1000V
- 11..0001mfd mica Cond. 1000V
- 12..0001mfd mica Cond. 1000V

- 13. .001mfd mica Cond. 1000V
- 14. .00125mfd mica Con. (s. Pad) 1000V
- 16. 3 gang tun. Cond. 24. 1.75 meg.Carbon
- Res. 1 Watt
- 26. 500,000 ohm Carb. Res. & Watt

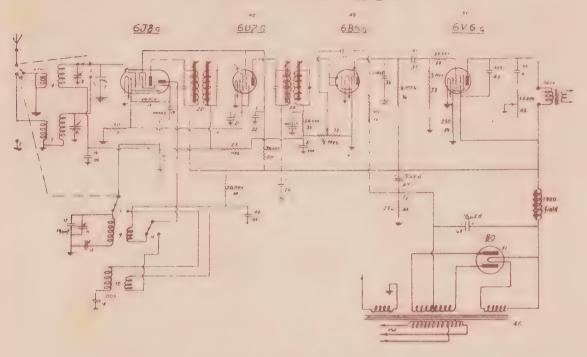
- 20. 15mmfd Bifilar Con. 28. 200,000 ohm Carbon
- 22. lomeg.Carb.Resis. 1 Watt
- 23. 1.75 meg. Carbon
- Res. & Watt 1 meg.Carb.Res. 25.
- Watt
- 200,000 ohm Carb. Res. & Watt
- Res. 2 Watt
 - 29. 20,000 ohm Carbon Res. 2 Watt
 - 30. 50,000 ohm Carbon Res. & Watt
 - 31. 500 ohm Carb.
 - Res. ½ Watt 33. 1.75 meg.Res. ½W
- INTERMEDIATE FREQUENCY: 173 K.C. BROADCAST COVERAGE: 1600 Kc. to 540.

MEMORANDA

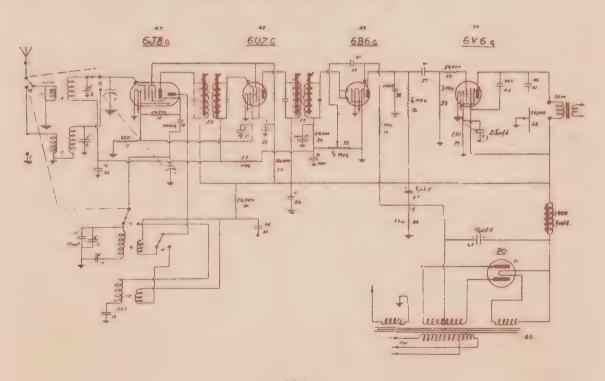
NATIONAL RADIO

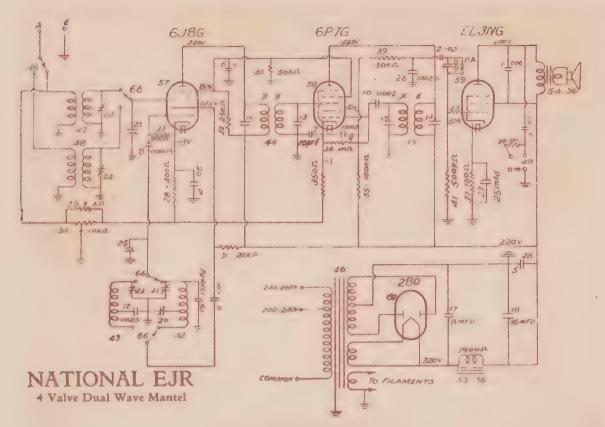
Manufactured by National Radio Corporation, Adelaide

NATIONAL 42GT

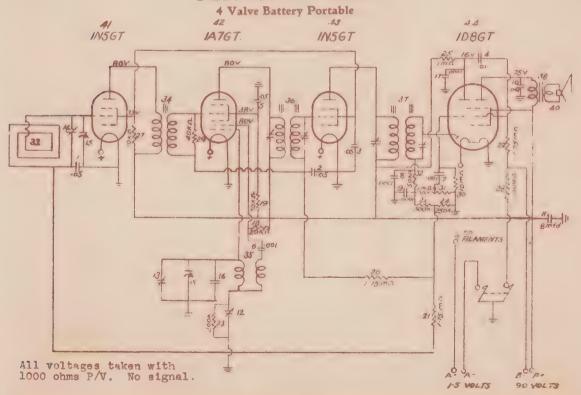


NATIONAL 142



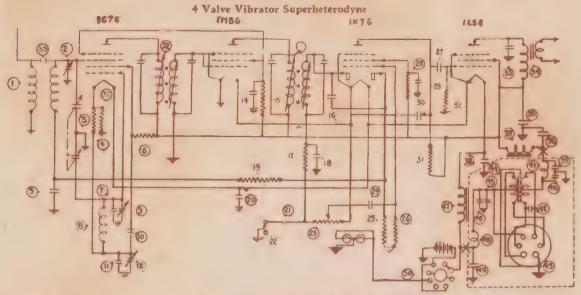


NATIONAL EKM



PHILCO RADIO

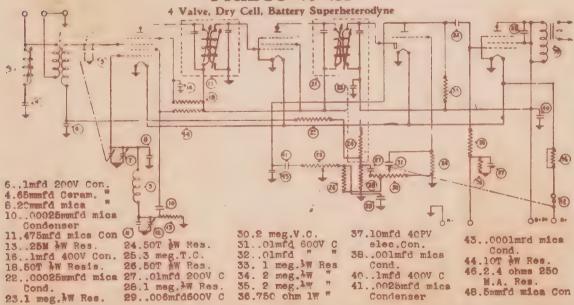
Manufactured by Philco Radio & Television Corp. (Aust.) Pty. Ltd., Waterloo, N.S.W. PHILCO 40-4MV



4. 50T W Rosis. 5. .lmfd 200V C. 6. lot W Pesis. 16. .0001 mica C 17. 50T ½W Res. 18. .00025mfd mica C 19. 1 meg. ½W Res. 20. 300mfd 12PV 31.250T W Res.38.500mfd 12PV 32.50T W " elec.Cond. 33..0003mfd 39..25mfd 300V 24..Olmfd 600V C 25.1 meg. 2 M. Res. 26.5 meg. 1W " 27..01 600V " 39..25mfd 300V C 20mmfd mica C mica Cond. 40..001mfd mica C 28.1 mog. lw " 29..05mrd 200V C .0004mfd micaC 35.12mfd 350PV 42..005mfd mica C 11. 475mmfd cer. C. 14. .lmfd 400V C. 15. 25T lW Pesis. elec. Cond. elec.Con. 45..5mfd 200V Con 21. .001mfd mica C 23. ½ meg. V.C. 59. 20mmfd mica C 30..00025mfd mica 36.12mfd 350PV 46..001mfd mica C Condenser elec.cond. 49..005mfd mica C 60.1 meg. W Res. 61.16.5 ohms 120MA Res. 51. .05mfd 200V C

POWER SUPPLY: 6 Volt Accumulator. POWER CONSUMPT.: .95 amp.pilot lights off. (average). INTERMEDIATE FREQ.: 460 k.c. VALVES USED: 1076 Preq.Con. 1M5G I.F. Amp. 1K7G 2nd det.1st Audio and AVC, 1L5G Output Fentode. COVERAGE: 540-1600 K.C.

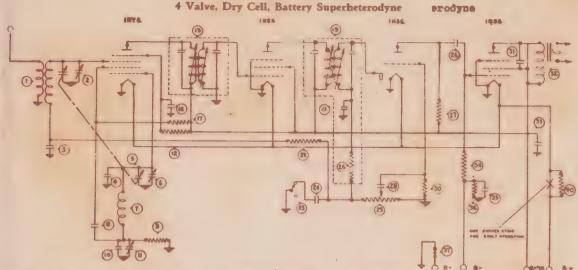
PHILCO 40-4X



PHILCO 40-4X (Continued)

POWER SUPPLY: 1 - 1.5 volt dry cell. 2 - 45 "B" batteries. POWER CONSUMPTION: 9.5 m.a. "B" Supply. 250 m.a. "A" Supply. INTERMEDIATE FREQ.: 460 K.C. VALVES USED: 1A76 -Preq. Con 1N56 I.F. amp. 1H56 2nd det, 1st audio & AVC. 1Q56 output pentode. COVERAGE -5401600 K.C.

PHILCO 40-4B



17.10T NW Res. 25.50T W Res. 31..001mfd mica 36. 500 ohms 3..1mfd 200V C (part of 19) Cond.
27.1 meg.*W Res. 33..lmfd 200V
28..0lmfd 600V pap.Cond. 21..00025mfd mica Con.(part of 19) 4.20mmfd mica C 1 Watt Pesistor B.400mmfd mica C 9.250T W Res. 10.475mmfd Con. 22.1 meg. W Res. 24..001mfd mica C 28..0lmfd 600V pap.Cond. pap.Cond. 34.2 meg.kw Res. 29.500T ohm V.C. 35.10mfd 40PV 40. 2.4 ohms 250 M.A. Res-12.50T W Res. 26..01mfd 600V

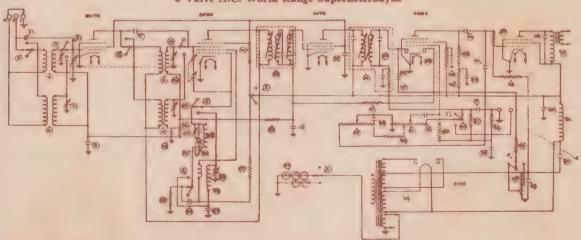
16..lmtd 200V C pap.Cond. 50.5 meg.lW Res. elec.cond.

POWER SUPPLY: 1-1.5 volt dry cell. 2-45 "B" batteries. POWER CONSUMP.: 9.5 m.a."B" supply.

250 m.a. "A" supply. INTER.PREQ.: 400 K.C. VALVES: 1A76 Freq.Con. 1N56 I.F. amp. 1R56 2nd det. 1st audio & AVC. 1Q56 output pent. COVERAGE: 540-1600 K.C.

PHILCO 40-65

6 Valve A.C. World Range Superheterodyne

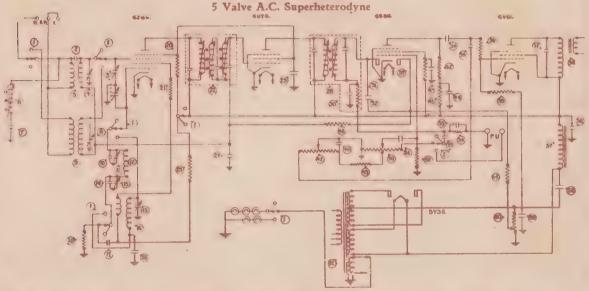


POWER CONSUMPTION - 60 watts. INTERMEDIATE FREQUENCY - 460 K.C. VALVES USED: 6076 R.F. amplifier. 6J86 Frequency converter. 6076 I.F. amplifier. 6G86 second detector, first audio and A.V.C. 6V66 output tetrode. 5Y36 Rectifier. COVERAGE - 540 - 1600 K.C.

PHILCO 40-65 (Continued)

56..006mfd 400V C 67.200 ohm tap-58.500T W Res. ped 25.75 43.250T 1W Res. 1. 5mmfd mica C 27. 25T 1W Res. 7. .5mmfd cer.C 9. .05mfd 200V C 44..0025mfd mica C 32...lmfd 400V C 45..25mfd 300V. C 33..05mfd 200V" 59..0001mfd mica Resistor 68.25 mfd 40P.V. 46.100T W Res. 0011 14.15T IW Res. 34.2nd Int. trans 47.1 meg. W Res. 48..006mfd 600V C 17.100T AW " 60..01mfd 600V C electr.con-35.,00025mfd 61.500T W Res. denser 19.20mmfd mica mica coll 49.3 meg. Var. cont. 62.50T W Res. 50.50T W Res. 63.8mfd 350V e 51.2 meg. Var. cont. ctr. cond. 36..00025 mfd 69.100T % Watt coil mica coil 63.8mfd 350V ele-Resistor 27.460mmfd cer. C 70..25mfd 300V 25T AW Res. 38.2 meg. w " 39..05mfd 400V R 52..01mfd 600V C 11..001mfd mica C 65.8mfd 525V condenser 53.2 meg. W Res. 55.50T W Res. elec.cond. 73..0 mfd 200V 23..00365mfd mica 66, lmeg. W Res. condenser 40 .. 01mfd 600V R Condenser

PHILCO 40-54



TWER CONSUMPTION: 60 Watts. INTER. FREQ.: 460 K.C. VALVES USED: 6J86 Freq.Converter. 6076 I.F. amp. 6686 second det. 1st audio and AVC. 6V66 output pentode. 5Y36 Pectifier. COVERAGE: 540 - 1600 K.C.

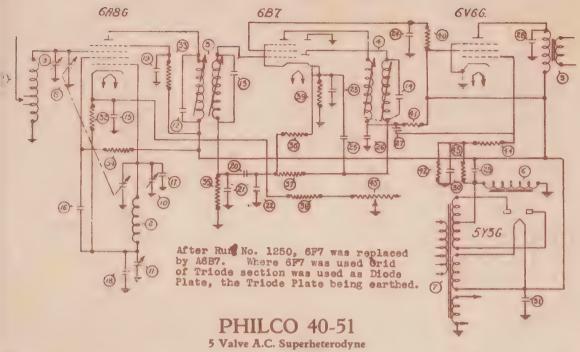
24..lmfd 200V C 25..lmfd 400V C 2. 5mmfd mica C 36.50T W Res. 58.500V 8 mfd 49.50T AW Res. 37..006mfd 600V C elec. cond. 59. 5 mfd 40P.V. 65mfd mica C 50.2 meg.V.C. 30..00025 mfd 39.500T W Res. 51..01mfd 600V C 7. 20mmfd " 14.460mfd cer." 42.250T 1W Res. mica cond. 52.5 meg. 1W Res elect. 31.100T W Res. 32..00025 mfd 53..0001 mica C 54.500T AW Res 17..001 mica 18.25T W Res. 43..05mfd 200V C condenser 44..25mfd 300V C 60. 200 ohms tap-45.100T W Res. 55..01mrd 600V C ped 25 res-19..0035mfd mica C mica cond. 33.2 meg. AW Res 46.1 meg. AW Res. 34.02mfd 400V C 47.3 meg. T.Con. 35..01mfd 600V C 48..006mfd 600V C 20.25T 1W Res. 56.325V 8mfd istor. 21.150 ohm 1W Res. elec.cond. 64.1 meg. W Res 25.25T 1W Res.

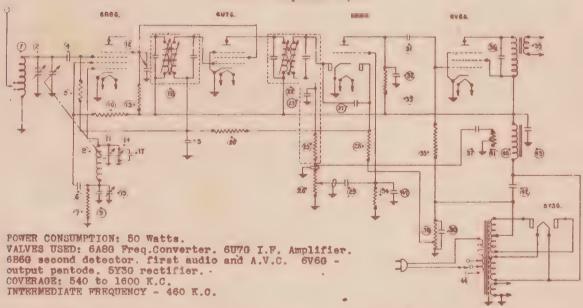
PHILCO 40-40

4 Valve A.C. Superheterodyne

POWER CONSUMPTION: 45 Watts. INTERMEDIATE PRQUENCY: 460 K.C. VALVES USED: 6A8G - freq. converter. 6B7 - reflexed I.F. and audio amp, diode detector, 6V6G output pentode. 5Y3G. COVERAGE: 540 K.C. to 1000 K.C.

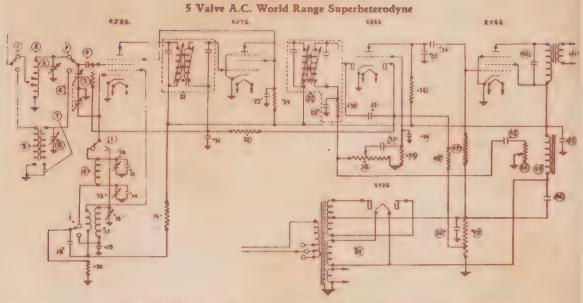
15.			.001mfd mica	2701mfd 600V cond.				2000 ohm W Resistor
16.	.00025 mica		.0001 mfd mica	28006mfd 600V				1 meg. W Res
	condenser		condenser	condenser				100T W Res.
17.	20mmfd mica	23.	lomfd 40 P.V.	29.16mfd 525V				100T + Watt
	condenser		elec. cond.	elec. cond.		Resistor		Resistor
18.	475mfd mica	24.	.05mfd 400V	301mfd 200V	36.	500T 1W	43.	250T % Watt
(condenser		condenser	condenser		Resistor		Resistor
19.	.05mfd 400V	25.	.00025 mfd mica	318mfd elec.	37.	100T WW	44.	500T & Watt
	condenser		condenser	cond.525V		Resistor		Pesistor
20.	.Olmfd 600V	26.	.001mfd mica	3250T W	38.	300 ohm	45.	7.500 ohms
	condenser		condenser	Resistor				ol.Cont.





- Resistor
 4. .00025 mfd
 mica cond.
- 5. .lmfd 200V condenser
- 6. 400 mmfd mica cond.
- 7. 50T & W
 Resistor
- 8. Oscil.Coil 9.475mmfd mica Condenser
- 10. 25T 1W Resistor 12. .1mrd 400V
- condenser
 13. 25T lWatt
 Resistor
 17. 25nmfd
- mica cond.
 20. 1 meg. W
 Resistor
- 23.250mmfd mica Con.(part of (22)
- 26.500T ohm Vol.Cont. 27.250mmfd mica cond.
- 28.1 meg. W resistor 29...01mfd
- 400V cond. 30.5mfd 40PV elec.con.
- 31. .01mfd 400V
- condenser
 52. 1000 mmfd mice
 condenser
- 33. 250T 1 Watt Resistor
- 54 5 meg. 1 Watt Resistor
- 35. 500T & Watt Resistor
- 36. .006 mfd 600V condenser 37. .002mfd mica Con.
- 38. Bias Res. 320 ohms tapped 70 ohms
- 40. Spkr.field 2000 ohms
- 2000 ohms 41.Tone Con. meg.
- 42.8mfd 525V elec. (insulated) con. 43.8mfd 525V elec.
- condenser 46.Spkr.966 2000
- ohms
 a. 47.100mmfd mica Con.

PHILCO 40-53



4. .00025mmfd mica con 5. 1 mag. W Res. .0055 mica C 11.20 mmfd mica condenser

resistor 14. 475mmfd cer. cond. 15. S.W.osc. 23..lmfd 400V 15. 3.W.osc. pap.res. trim.(part of 52) 24.25T lW Res.

16. 25T 1W Res. 18..00025mmfd mica Con.

19..05mfd 200V pap.cond. 20. 50T } Watt

29..00025 mmfd mica cond. 30.100T W Rea

31..lmfd 200W pap.cond. 32.1 meg.kw R. 33..00025 mfd

mica cond. 34..01mfd 600V pap.Cond.

35..001mfd mica C 43. 525V 8mfd 36.250T+W Res. elec. cond

37... 01mfd 600V pap. cond. 38.500T Vol.Con.

39.5 meg.lw Res. 40. .006mfd 600V pap. cond. 42..002 mica con. 44. Tone con. meg

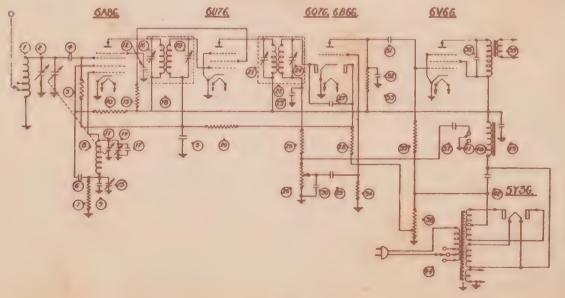
elec. condenser 46. 625V 8 mfd elec.con.(insul.)
47.500T W Res. 48. 1 meg. AW Res.

49. 520 ohms tapped 700 ohms 70 N.A. 50.5 mfd 40P.V. elec. condenser

POWER CONSUMPTION: 50 watts. INTERMEDIATE FREQUENCY: 460 K.C. VALVES USED: 6J80 Freq. converter. 6U7G I.P. amp. 6B60 2nd det.lst audio and AVC. 6V60 output pent. 5Y30 rectif. COVERAGE: 540 K.C. to 1600 K.C. SPER.FIELD: 2,000 ohms.

PHILCO 40-50

5 Valve A.C. Superheterodyne



PHILCO 40-50 (Continued)

POWER CONSUMPTION: 50 Watts. INTER. FREQ.: 460 K.C. VALVES USED: 6A86 - Freq. con. 6U7G I.F. amp. 6B6G-6Q7G second det. 1st audio and AVC. 6V6G - output pentode. 5Y3G Rectifier. Spkr.Field: 1,500 ohms. COVERAGE - 530 - 1600 K.C.

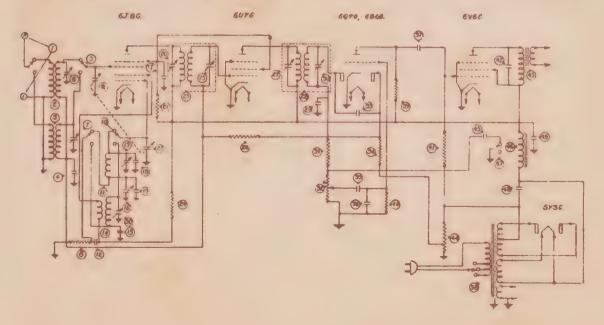
28. 1 meg. W Res. 36. .006 mfd 600V 3. 1 meg. W Res. 11. Gang cond. 12. .1mfd 400V Con. 29..01 mfd 400V 4. .00025 mfd condenser 13. 25T 1W Res. condenser 37. 1000 mmfd mica mica cond. 17, 25mmfd mica condenser 5. .1mfd 200V 30. 100mmfd mica condenser 42. 8 mfd 525V cond. condenser 20. 1 meg. W Res. electrolyti 31. .Olmfd 400V 6. 400 mmfd mica 23. 250mmfd mica condenser 43. 8 mfd 525V condenser cond. 25. 100T W res. 32. 100minfd mica electrolytic 7. 50T W Res. condenser 40. Spkr.field -8. Osc. coil 33. 250T W res. 34.5 meg. 1W Res. 35.500T W Res. 26. 500T vol.con. 1,500 ohms 9. 415mmfd mica cond. 27.250mmfd mica (part of 47) 10. 25T 1W Res. condenser

PHILCO 40-59

5 Valve A.C. World Range Superheterodyne

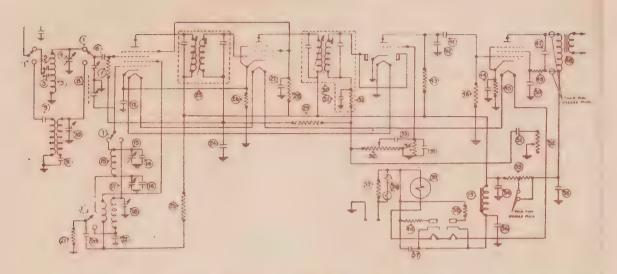
POWER CONSUMPTION: 50 watts. INTERMEDIATE FREQ.: 460 K.C. VALVES USED: 6J8G Freq. con, 6U7G I.F. amp. 6B6G or 6Q7G 2nd det. 1st audio and A.V.C. 6V6G output pentode. 5Y3G rectifier. SPKR. FIELD: 1,500 ohms. COVERAGE: 530-1600 K.C.)

4. .1mfd 200V con. 21. 25T 1W Res. 35. .Olmfd 600V C 43. 1000 mmfd micu 24. 25T 1W Res. 8. 50T AW Res. Condenser condenser 26. 1 meg. 3 Res. 44. 320 ohms tapp. 12. 400 mmfd 36. 100mmfd mica 29. 250mmfd mica 70 ohms. 70 condenser mica cond. cond. 31. 100T aw Res. M.A. resistor 15. .005mfd cer-37. .Olmfd 400V 48, 525V 8 mfd condenser amic cond. 17. .lmfd 400V con 32. 500T Vol.con. 39.250T W Res. electrolytic 40. 5 meg. 1W Res. 33. 250mmfd mica condenser 18. 15mmfd cond. 41. 500T N Res. cond. 49. 525V 8mfd 19.400mmfd cera-34.1 meg. W Res. 42. .006mfd 600V elect. cond. mic condenser



PHILCO 41-53U

5 Valve A.C./D.C. Superheterodyne

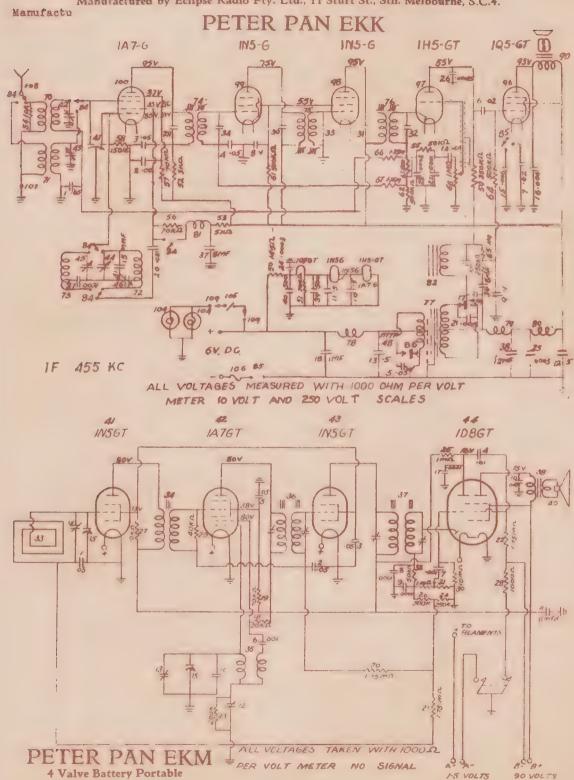


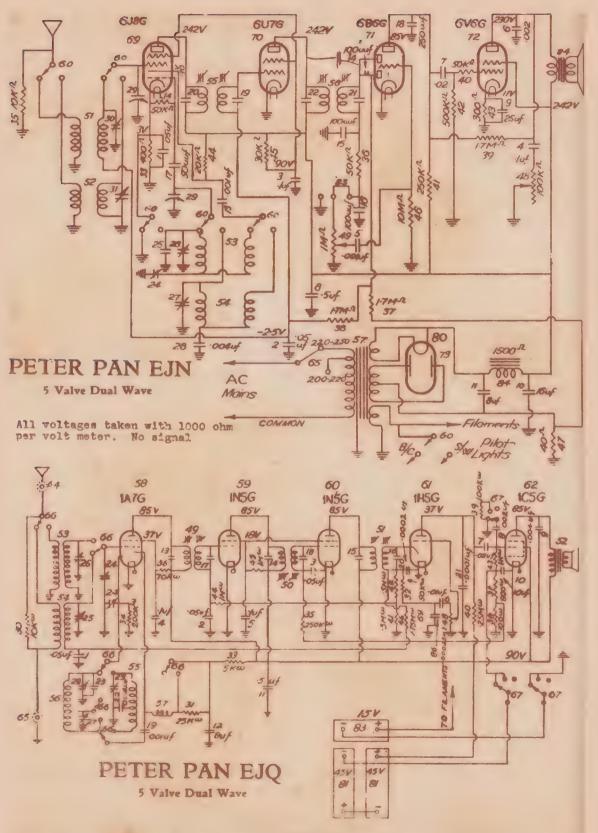
14. 20mmfd mica " POWER SUPPLY: 200-	1.29. 1 meg. W Res. 3100025mfd mice -260 volts. 40-60 cy	33olmfd 600V C 34. 5 meg.lW Res. 35000lmfd mica	43. 250T lW Res. 44. lOmfd 40V elec.Cond. 45. 500 ohm 2W Res. 46. 500T W Res 47006mfd 600V 49. 5000 ohm W Res. 5025mfd 300V 51002mfd mica 52. l meg.Tone Cont. (tapped) of same voltage. SED: 6J8G freq. 6	670lmfd 600V POWER CONSUMPTION:
--------------------------------------	--	---	--	---------------------------------

MEMORANDA

PETER PAN RADIO

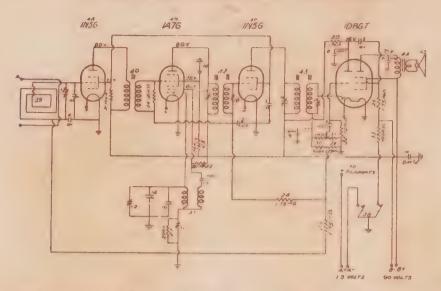
Manufactured by Eclipse Radio Pty. Ltd., 11 Sturt St., Sth. Melbourne, S.C.4.





PETER PAN EJP

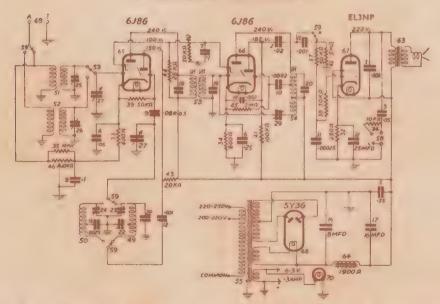
4 Valve Battery Operated Heavy Duty Portable



RANGE: Kilocycles 1600 - 540 Ko. Metres 187.5 - 555.5
All voltages taken with 1000 ohms per volt meter. No. signal

PETER PAN EKR

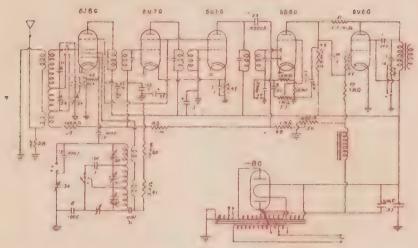
4 Valve Dual Wave Mantel



RANGE: B/C Band: 540 Kc. to 1620 Kc. S/W - 6.9 m/c to 22.25 m/c. (13.5 metres to 43.5 metres).

PETER PAN EJK

6 Valve Triple Wave Console

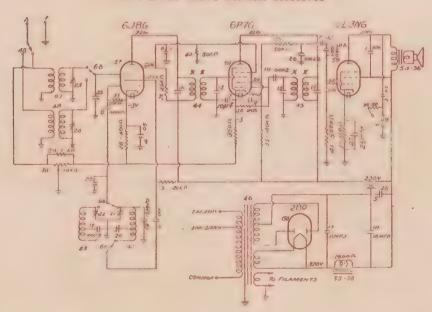


RANGE: Broadcast band - 540 Kc to 1620 Kc.

Short Wave band - 25 m/c. to 11 m/c. (12 metres - 27 metres). 12.5 m/c to 5.65 m/c. (24 metres to 53 metres).

PETER PAN EJR

4 Valve Dual Wave Mantle Receiver

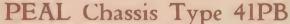


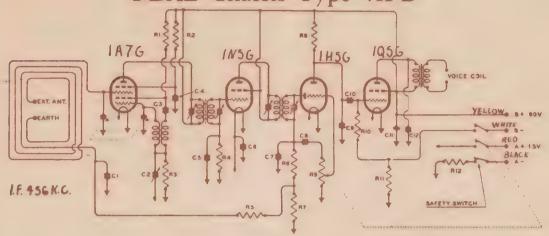
RANGE: Broadcast 540 kc to 1620 Kc.
Short Wave - 6.9 m/c to 22.25 m/c. (13.5 metres to 43.5 metres).



PEAL RADIO

Manufactured by Peal Products, 16 Australia Street, Camperdown, N.S.W.





```
Cl - .05mf 200V Paper
                           C9 - 250mmf mica
                                                      R5 - 1M ohms } Watt
C2 - 5 plate adj.pad.
                           Clo- .Olmf 400V pap.
                                                      R6 - .5M ohms
C3 - 1000mmf mica
                           Cll- 8mf elec.525PV
                                                      R7 - .1M ohma
04 - .05mf 400V paper
                           C12- 4000mmf 400V pap.
                                                      R8 - .5M ohms
                           Bl - 10K ohms | Watt
C5 - .05mf 200V paper
                                                      R9 - .5M ohms V.C.
R10- lM ohms 1 Watt
C6 - .3mf 200V paper
                           R2 - 50K ohms watt
C7 - loommf mica
                           R3 - .25M ohms & Watt
                                                      R11- 600 ohms W/Wnd.
C8 - .Olmf 400V paper
                          R4 - 2M ohms + Watt
                                                      R12- .. 3 ohms
VALVES: 1A7G Convertor. 1N5G I.F. amp. 1H5G Det. Audio. 1Q5G Power amp.
```

	PLA	l E	SCI	REEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1A7G	83	.5 ma	38	.83 m.a	. 70	0
1N5G	83	.68 "	83	.18 *		0
1H5G	32	.05 "				0 -
1956	80	5.5 "	83	8 "		6.5

Total "B" Battery drain, no signal - 10 M.A.

Total "A" Battery drain, .25 amp.

In earlier releases using a 105G in lieu of the 105G, Rll was 850 ohms and in some of these models R4 together with its by-pass condenser C5, was not used in the grid circuit of the 1N5G.

PEAL Chassis Type 52WA

		10K chms ? Watt	R13- 2	200 ohms W/W	C3 -	loommf mica
R2	see	.lM ohms { Watt	R14-	.5M ohms V.C.	C4 -	1000mmf mica
R3	-	200 ohms W/W	RIE-	.25M ohms } Watt	C5 -	3900mmf mica plue
R4	-	50K ohms & Watt	R16-	.25M ohms & Watt		or minus 18
R5	-	5K ohms & Watt	R17- !	50K ohms 1 Watt	C6 -	6 plate ad pad .
R6	90	5K ohms & Watt	R18-	.5M ohms & Watt		8mf elec. 500 P.V.
		lM ohms 4 Watt	R19- 2	250 ohms W/Wnd.		.lmf 400V paper
				.lM ohms & Watt		.05mf 400V paper
		10K uhms 2 Watt		5K ohms & Watt		.O5mf 400V paper
		50K ohms 1 Watt	R22- 2			lmf 400V paper
		25M ohms & Watt				loommf mica
R12	,	4K ohms & Watt	C2 -	.25mf 400V pap.	013-	loommf mice

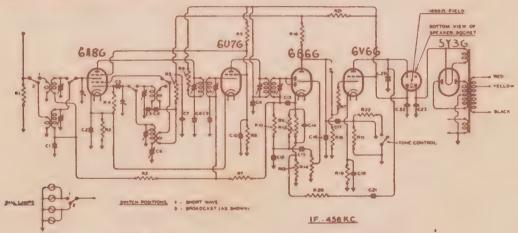
PEAL 52WA (Continued)

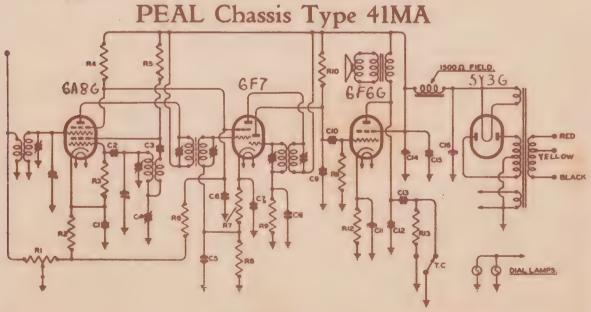
C14- lomf elec. 40PV C17- .olmf 400V pap. C20- 5000mmf mica C15- .olmf 400V pap. C18- .olmf 400V pap. C21- .o2mf 400V pap. C16- 250mmf mica C19- lomf elec.40PV C22- l6mf elec.40PV C23- 8mf elec.500PV

VALVES: 6A8G Convertor. 6U7G I.F. Amp. 6B6G Det., A.V.C., 1st A.F. 6V6G Power. 5Y3G Rectifier.

	PLATE		SCREEN		OSC. ANODE		
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS	
6A8G	170	4.2	93	3.6	142	3.8	
6U7G	195	5.8	93	1.6		3.8	
6B60	73	.3			•	.8	
6V6G	180	33	195	4.0		10	
5Y30	Output -	- 295 volt	8				

All measurements made at no signal.





I.F.: 456 K.C.

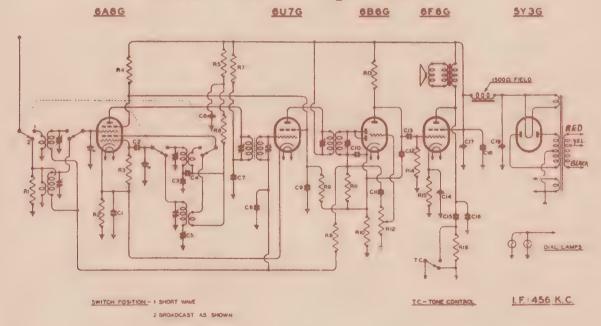
T.C. - TONE CONTROL

PEAL 41MA (Continued)

```
Rl -5K ohms VC
                  R9 -. 5M ohms W
                                       03 -looommf mica
                                                           Clo--02mf 400Vpap
R2 -460 " W/W
                  R10- .25M ohms W
                                       04 -5 Plate Adj.
                                                           Cl1-lomf elec.40VP
R3 -50K ohms W
                  R11- .5M ohms W
                                             pad .
                                                           C12-5000mmf mica
R4 -20K ohms
             1W
                                       C5 -.02mf 400V pap
                  R12-460 ohms W/W
                                                          C13-.02mf 400V pap
             행
R5 -30K ohma
                                       06 -.lmf 400V
                  R13-15K ohms W
                                                           Cl4- Anf elec.
R6 -50K ohms
                                       C7 -. lmf 400V
                                                                   500 V.P.
R7 -500 ohms W/W
                  Cl -.lmf 400V pap.
                                       08 -.02mf 400V
                                                           C15-.lmf 400V pap
R8 -4K ohma aw
                  C2 -loomnf mica
                                       C9 -250mmf mica
                                                           Cl6-8mf elec.500VP
               PLATE
                                 SCREEN
                                              OSC .ANODE
  VALVE VOLTAGE CURRENT VOLTAGE CURRENT
                                             GRID VOLTAGE
                                                            BIAS
                               92
   BARG
            225
                    2.lma
                                     3.7ma
                                                120
                                                             4.4
   6F7 (I.F.) 225
                    4.2 "
                               92
                                      .9
                                                             2.7
                     .12"
       (Det.) 145
                                                            23.0
              205 25.0 "
                              225
                                     4.2
                                                            15.0
   6F6G
              Output - 300 volta
   5Y3G
```

All measurements made with no signal tuned in and volume control full on. Figures shown are measured when the mains voltage is 215 or 240 volts whichever range is selected on the transformer tap.

PEAL Chassis Type 52MA



R1 -lok obms W R12-.5M ohms VC C5 -5 plate adj. C13-.02mf 400V R2 -250 ohm W/W R13-.25M ohms &W pad. paper R14-.5H ohms W C6 -9mf elect. R3 -50K ohms W Cl4-lomf elect. R4 -lok ohms 2W R15-460 ohm W/W 500 V.P. 40VP C15-.02mf 400V pap. R5 -5K ohms R16-15K ohms W C7 -.lmf 400V pap C16-5000mmf mica R6 -5K ohms C8 -. C5mf 400V " R7 -5K ohms W. C9 -.05mf 400V " C17-Smf elect. C1 -.5mf 400V pap R8 -2M ohms W 500 V.P. C2 -50mmf mica Clo-250mmf mica R9 -20K ohms W C3 -3900mmf mica Cll-.02mf 400V C18-.lmf 400V pap Rlo-200 ohms W/W C19-Smf elect. plus or minus 1% paper C12-250mmf mica Rll-.54 ohms W C4 -1000mmf mica 525 V.P.

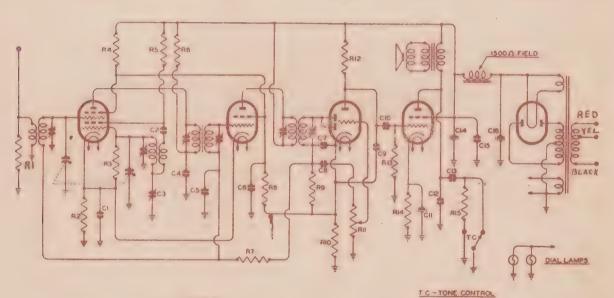
PEAL 52MA (Continued)

PLATE			SCI	REEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A8G	183	4.Oma	93	5.8ma	140	5.6
6U7G	205	6.9 11	93	1.7 "		5.6
6B6G	100	4 11				1.1
6F6G	190	25.0 *	205	4.2 "		14.0
573G	Outra	t - 295	volts.			

All measurements made with switch in short wave position and no signal. The figures shown are measured when the mains voltage is 215 or 240 volts whichever range is selected on transformer tap.

PEAL Chassis Type 51MA

6A8G 6B6G 6F6G 5Y3G



I.F: 456 K.C.

	PLATE		SCF	REN	osc		
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID	VOLTAGE	BIAS
6A8G	188	3.3 ma	100	3.7 ma		120	5.1
6U7G	205	8.0 "	100	2.0 **			5.1
6B6G	95	.4 n					1.2
6 F 6G	190	23.0	205	4.0 *			13.5
5 Y 3G	Output	t - 295 v	rolts			·	

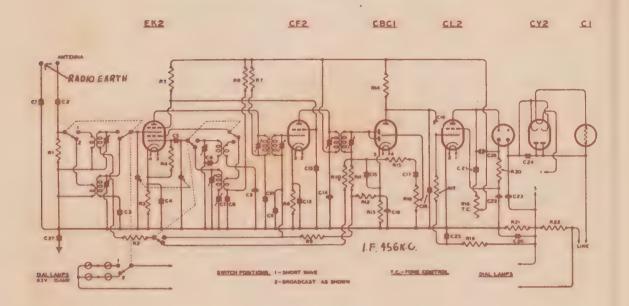
All measurements to be made with no signal tuned in. The figures shown are measured when the mains voltage is 215 or 240 volts whichever range is selected on the transformer tap.

Rl	000	10K ohms	34	R7 - 2M ohms W	R1225m ohms	R15-	15K ohma W
R2	_	250 ohms	W/W		a Watt	Cl -	.5mf 400V
R3	Olle	50K ohms	-gw				paper
R4	-	lok ohms	2W	R10- 200 ohms	2 Watt	G2 -	1000mmf mica
R5	-	30K ohms	- PIN	Wire Wound	R14- 460 ohms		5 plate adj.
R6	-	5K ohms	W	Rll5M ohms V.C.	Wire wound		padder

PEAL 51MA (Continued)

C4 -.lmf 400V pap C8 -.02mf 400V pap Cl2-5000mmf mica Cl4-8mf elect.
C5 -.05mf 400V C9 -250mmf mica Cl3-.02mf 400V 500 V.P.
C6 -.05mf 400V Cl0-.02mf 400V pap paper Cl6-8mf elect.
C7 -250mmf mica Cl1-lomf elec.25VP Cl5-.lmf 400V pap. 500 V.P.
VALVES: 6A8G Converter. 6U7G I.F. Amp. 6B6G Det. AVC 1st A.F. 6F6G Power. 5Y3G Rectifier.

PEAL Chassis Type 52DC



R1 - 10K ohms } Watt R2 - .1M ohms + Watt R3 - 850 ohms W/Wnd. R4 - 50K ohms & Watt R5 - 50K ohms } Watt R6 - lok ohms & Watt R7 - 5K ohms & Watt R8 - 500 ohms & Watt R9 - 1M ohms } Watt Rlo- lm ohms 1 Watt R11- .25M ohms } Watt R12- .1M ohms 1 Watt R13- 1K ohms & Watt R14- 1M ohms & Watt R15- 50K ohms } Watt R16- .5M ohms V.C. R17- .25M ohms } Watt

R18- 50K ohms T.C. R19- .25M ohms { W R20- 15K ohms 1W . R21- 360 ohms W/Wnd R22- 90 ohms W/Wnd Cl - 5000mmf mica C2 - 5000mmf mica C3 -.05mf 400V pap. C4 -. lmf 400V pap. C5 -50mmf mica" C6 -5900mmf mica plus or mimus 1% C7. -6 plate adj.pad. C8 -. lmf 400V pap C9 -8mf elec.500PV Clo-.lmf 400V pap

Cll-.05mf 400V pap.

244

C12- .lmf 400V paper Cl3-.05mf 400V paper Cl4-15mf elect. 400 P.V C15-100 mmf mica Cl6-lomf elec. 40 P.V. C17-.02mf 400V paper C18-500 mmf mica C19-.02mf 400V paper C20-.lmf 400V paper C21-.05mf 400V paper C22-8mf elec.500 P.V. C23-Smf elec.500 P.V. C24-.Olmf mica C25-.25mf 400V paper C26-5000mmf mica C27- .08mf 600V pap-**BX**

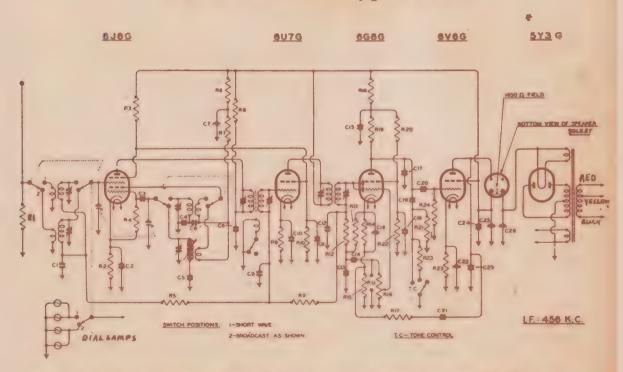
PEAL 52DC (Continued)

	PL	TE	SCI	REEN	OSC .ANODE	
VALVE	HOLTICV	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
EK2	155	8 ma	55	1.1 ma	125	4.0
CF2	160	2.6 *	55	1.1 *		1.9
CBC1	45	1.0 "				1.0
CL2	155	34 "	. 80.	5.0 "		18
CAS	Output	- 250 v	olts			

VALVES: EK2 Converter. CF2 I.F. Amp. CBCl Det. Audio. CL2 Power. CY2 Rectifier.

All measurements made with no signal tuned in. The figures shown are measured when the mains voltage is 240 volts A.C. The heater current for all valves is automatically controlled by the ballast valve and no adjustment to the receiver is necessary to suit various supply voltages.

PEAL Chassis Type 52CA



VALVES: 6J8G Converter, 6U7G I.F. Amp. 6G8G Det. AVC 1st A.F. 6V6G - Power. 5Y3G Rectifier.

VALVE VOLTAGE AND CURRENT READINGS: All measurements made with switch in short wave position and no signal. The figures shown are measured when the mains voltage is 215 or 240 volts.

PEAL 52CA (Continued)

		PI	ATE	SCF	reen o	SC.PLATE		
	VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BI	AS
	6 J8 G	245	2.7	95	2.5	120	4	1.2
	6070	260	7.8	95	2.0	,	. 4	1.4
	6080	55	.5	15	.2		3	1.1
	6V 6G	240	40	260	5.0		12	
	5Y3G	Output	- 410 V	olta				
R2 R3 R4 R5 R6 R7 R8 R9 R1C R1C	-400 -20K -30K 1M -20K -10K -5K 0 -400 0-30K 1-1M 0 2-50K 325M	ohms www. ohms ww.	R20-lm or R21-lm or R2225m R23-20K R245m R25-250 C105m C2lmf	ohms VC ohms W ohms W ohms W ohms W ohms W	C plus C5 -38 plus 0 C60 C7 -8m C80 C90 C101 C110 C12-10 C13-10 C140		1% 1% pap DOVP pap " " " "	

PEAL Chassis Type 52PB SW. ANT SARTH SART

R1 -50K ohms W R11-.5M ohms C2 -. 25mf 40 OV pap C11-.05mf 20 OV paper C12-.05mf 400V R12-.1M ohms W C3 -100mmf mica R2 - .25% ohms R13-.5M ohms VC C4 -. 05mf 400V pap C13-100mmf mica R3 -5K ohms W C5 -Smf elec.525PV C14-1000mmf 400V pap R4 -5K ohms R14-.5H ohms W C6 -2000mmf mica C15-4000mmf 400V pap R5 - . 1M ohms R15-1W ohms W R6 -2M ohms W C7 -3300mmf mica C16-.0lmf 400V pap R16-50K ohms aw C17-250mmf mica R7 -. 1M ohms R17-.25M ohms plus or minus 1% R18-600 ohms W/W C8 -5plate adj.pad C18-.0lmf 400V pap R8 - . 1M ohms R9 -2M ohms Cl -.05mf 400V Cl9-25mf elec.40PV 09 -.05mf 200V pap R10-lM ohma regaq Clo-Smf elec.355PV

VALVES: 1A7G Converter. 1N5G I.F. Amplifier. 1N5G I.F. Amplifier. 1H5G - Det., A.V C. 1st A.F. 1Q5G Power.

Earlier Models were released with a 1050 in lieu of the 1056 shown, and the limiting resistors R6 and R9 together with their by-pass condensers C9 and C11 were not used in the grid circuit of the 1N56's.

PEAL 52PB (Continued)

	PLAT	ME	SCR	EEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CHERENT	GRID VOLTAGE	TOTAL
1A7G	83	.5	38	.83	70	BIAS
1N5G	83	.68	50	.17	10	0
1N5G	83	.68	50	.18		0
1H5G	35	.05				0
1.Q5G	80	5.5	83	.8		ייי
Total "A"	drain 3	amp.	Total "B"	drain,	no signal 11 M.	Α.

LN5G

LA7G

PEAL Chassis Type 52MB

INSE

IH5G

105G

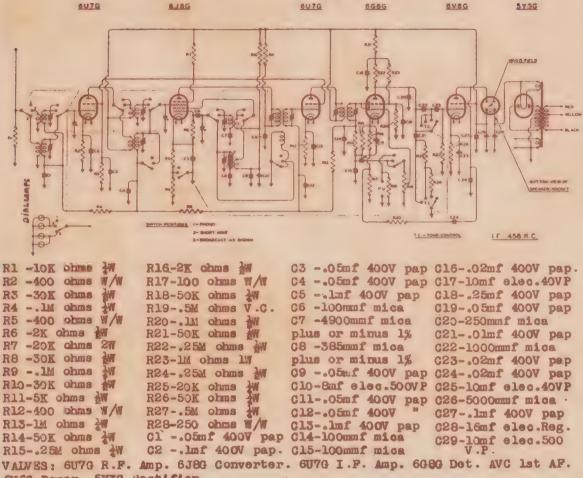
LF.: 456 K.C. R1 -10K ohms \W R12-.5M ohms \W C3 -3900mmf mica Cl3-.Olmf 400V Paper R2 -50K ohms ¹W R13-.1M ohms R3 -.25M ohms R14-.5M ohms C14- .00lmf " plus or mins 1% R14-.5M ohms VC C4 -1000mmf mica C15--004mf 400V R4 -5K ohms &W R15-.5M ohms W C5 -5Plate adj.pad. C16-250mmf mica R5 -5K ohms \frac{1}{2}W R16-1M ohms +W C6 -.05mf 400V pap. C17-.01mf 400V Paper C18- 25mf elect. R6 -2M ohms \frac{1}{4}W R17-600 ohmsw/W C7 -8mf elec.500PV R7 -. 1M ohms R18-50K ohms WW R19-.25M ohms C8 -.05mf 400V Pap. 40PV R8 -.1M ohms" C9 -.05mf 400V Pap. C19- 8mf elec. R9 -2M ohms " R20-5K ohms aw C10-.25mf 350PV R10-.1M ohms W Cl-.05mf 400V Pap.Cll-.05mf 020- .05mf 400V C2-100mmf mica Rll-lM ohms W C12-100mmf mica Paper VALVES: 1A7G Convertor. 1N5G I.F. Amplifier, 1N5G I.F. Amplifier. 1H5G Det., A.V.C., 1st A.F. 1Q5G Power.

PLATE			SCRI	EEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1A7G	83	.5	38	.83	70	0
1N5G	83	.68	50	.17		0
1N5G	83	.68	50	.18		0
1H5G	35	.05				0
1056	80	5.5	83	.8		7

Total "B" battery drain, no signal - 11 M.A. Total "A" battery drain, .3 amp.

Earlier models were released with a 105G in lieu of the 1Q5G shown, and the limiting resistors R6 and R9 together with their by-pass condensers C8 and C11 were not used in the grid circuit of the 1N5G's. R20 and C20 were not fitted to models prior to No.P8228.

PEAL Chassis Type 62CA



6V6G Power. 5Y3G Rectifier.

	PLA	TE	3CI	reen o	SG.PLATE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	VOLTAGE	BIAS
5070	235	7.2 ma	85	1.7ma	22.	-4.0
6J8G	225	2.0	85	1.7 "	110	-3.3
6U7G	235	7.2 *	85	1.7 *		-4.0
2080	60	.55 ^h	20	.12"		-1.3
6V 6G	220	40.0 "	235	2.5 =	·	11.5
EWRO	Conditions de	- 505 ***	olte'			

All measurements made with switch in short wave position and no signal.

PEAL Chassis Type 152CA

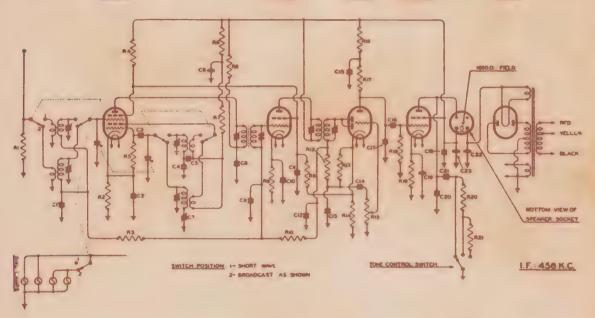
```
R9 -400 ohms W/W R17-.25M ohms aw
                                                    34 -4900mmf mica plus
R1 -10K ohms 1W
                                 R18-.5M obms W
                                                        or minus 1%
W -400 ohms -W/W
                Rlo-1M ohms W
                                                    C5 -1000mmf mica
                R11-30K ohms W
                                R19-460 ohms W/W
R3 -. 1M ohms 1W
                                                    C6 -8mf elec.500VP
                                 R20-5K ohms
                R12-50K ohms W
R4 -20K ohms 2W
                R13-.25M ohms W R21-15K ohms W
                                                    C7 -5 plate adj.pad.
R5 -50K ohms W
                R14-300 ohms N/N Cl -. 05mf 400V pap C8 -. lmf 400V paper
R6 -lok ohms
                R15-.5M ohms VC C2 -.lmf 400V pap C9 -.05mf 400V paper
R7 -lok ohms W
                R16-50K ohms W C3 -50mmf mica
                                                    Clo-. Lof 400V paper
R8 -5K ohms W
```

PEAL 152CA (Continued)

C11-.05mf 400V pap. C15- .25mf 400V C17-250mmf mica C21-.05mf 400V pap C12-100mmf mica paper C18-.1mf 400V pap. C22-8mf elec. C13-100mmf mica C16-.02mf 400V C19-10mf elec.40VP 500VP C14-.02mf 400V pap. paper C20-5000mmf mica C23-15mf elec. Reg. VALVES: 6A8G Convertor. 6U7G I.F.Amplifier. 6B6G Det., A.V.C., 1st A.F. 6F6G Power. 5Y3G Rectifier.

	PLATE		SCREEN		OSC. ANODE	
VALVE	- VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A8G	230	2.8	85	4.5	140	-5.1
6076	245	6.5	85	1.5	•	-3.5
6B6G	82	.55				8
6F6G	230	30.0	245	5.0		-16.5
5Y3G	Output -	- 355 volt	8			

All measurements to be made with switch in short wave position and no signal 8A8G 6U7G 686G 6F6G 5Y3G



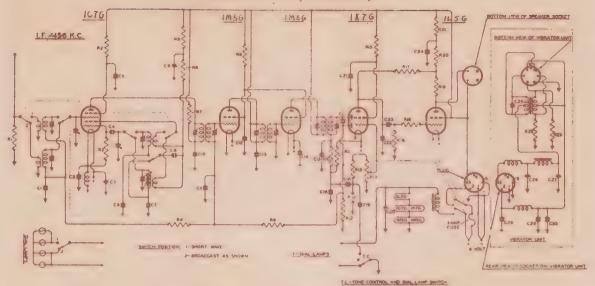
PEAL Chassis Type 52CV

	I LIL C	lassis Type Ju	
R1 -10K ohms W R16-	50K ohms 1W	C7 -385mmf mica	C2105mf 400V paper
R2 -50K ohms W R17-	.25M ohms W	plus or minus 1%	C22-250mmf mica
R3 -50K ohms W R18-	.5M ohms W	C8 -1000mmf mica	C2301mf 400V pap
R4 1M ohms W R19-	.25M ohms W	C9 -8mf elec.350VP	C24lmf 400V pap
R5 -5K ohms \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Clo05mf 400V pap	C2502mf mica 1500VT
R6 -5K ohms W R21-	10K ohms W	Cll05mf 400V "	C26-8mf elec.500VP
R7 -5K ohms www R22-	200 ohms W	C1205mf 400V "	C27-8mf elec.500VP
R81M ohms 1W R23-	·200 ohms ½W	C131Mf 400V "	C2825mf 200V paper
R9 -1M ohms W C1 -	.05mf 400V pap	C1425mf 400V "	C2925mf 200V paper
R10-1M ohms 1W C2 -	.lmf 400V "	C15-100mmf mica	C30Olmf mica
R115M ohms 1w C3 -	10mf elec.40VP	C16-250mmf mica	
R12-1M ohms 1W C4 -	100mmf mica	C17-100mmf mica	
R13-1M ohms W C5 -			
R14- 5M ohms VC C6 -	4900mmf mice	C19-2000mmf m1ca	

VALVES: 1C7G Convertor. 1M5G 1st I.F. Amplifier. 1M5G 2nd I.F. Amplifier. 1K7G Det. A.V.C. 1st A.F. 1L5G Power.

R15-1M ohms W plus or minus 1% C20-500mf elec.12VP

PEAL 52CV (Continued)



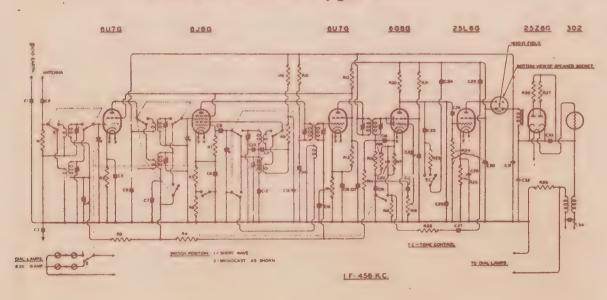
	PL	ATE	SCI	REEN	OSC. ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
107G	127	1.25	53	1.6	95	42
1M5G	135	1.25	45	.4		.0
1.M5G	135	1.25	45	. 4		0
1K7G	55	.25	40	.1		-2
11.5G	130	7.5	135	1.6		-4

Total "B" current drain 18.5 m.a. Total battery drain- without dial

lamps - 1.1 amp.

All measurements taken with switch in short wave position and no signal tuned. NOTE: Bias measurements for any valve are taken between that volves negative filament and the point on the series filament system to which its own grid return is connected.

PEAL Chassis Type 62CU



PEAL 62CU (Continued))

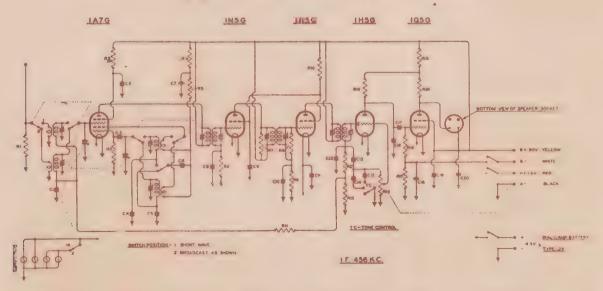
R1 -10K ohms WW R2 -500 ohms W/W R31M ohms WW R41M ohms WW	R18-100 ohms W/W R195M ohms VC R2025M ohms ½W R21-1M ohms ½W	C5lmf 400V pap. C6lmf 400V pap C705mf 400V " C8lmf 400V "	C20-10mf elec.40VP C2102mf 400V pap C2205mf 400V " C2301mf 400V "
R5 -400 ohms W/W	R22-50K ohms W	C9 -100mmf mica	C2401mf 400V "
R6 -850 ohms W/W	R23-50K ohms W	Clo-4900mmf mica	C25-250mmf mica
R7 -30K ohms &W	R245M ohms \dagger W	plus or minus 1%	C2602mf 400V pap
R8 -5K ohms W	R25-150 ohms W/W	CllOlmf 400V pap	C2701mf 400V "
R9 -10K ohms W	R26-100 ohms 3W	Cl2-385mmf mica	C28-10mf elec.40VP
R10-5K ohms W	plus or minus 5%	plus or minus 1%	C2902mf 400V pap
R11-400 ohms W/W	R27-100 ohms 3W	Cl3-8mf elec.525VP	C30-8mf elec.500VP
R12-30K ohms W	plus or minus 5%	Cl405mf 400V pap	C31-8mf elec.500VP
R13-5K ohms W	R28-45 ohms W/W	C1505mf 400V pap	C32-8mf elec.500VP
R14-1M ohms W	Cl -5000mmf mica	Cl6lmf 400V pap	C33Olmf mica
R15-50K ohms 1W	C2 -5000mmf mica	C175mf 400V pap	C3401mf
R1625M ohms \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	C308mf 600V pap	C18-100mmf mica	
R17-2K ohms W	C405mf 400V "	C19-100mmf mica	

VALVES: 507G R.F. Amplifier. 6J8G Convertor. 607G I.F. Amplifier. 6G8G - Det., A.V.C., lst A.F. 25L6G Power. 25Z6G Rectifier.

	PLATE		SCREEN		OSC. ANODE		
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS	
607G	196	5.2	72	1.2		-3.25	
6 J 8 G	192	.8	72	1.25	120	-3.0	
607G	196	5.0	72	1.1		-3.5	
6 G8G	25	35	15	.1		9	
25L6G	85	40.0	100	4.5		-7.0	
25766	Outmit .	- 225 Vol	ta				

All measurements made with switch in short wave position and no signal. The figures shown are measured when the mains voltage is 240 volts A.C. The heater current for all valves is automatically controlled by the ballast valve and no adjustment to the receiver is necessary to suit various supply voltages.

PEAL Chassis Type 52CB



VALVES: 1A7G Convertor. 1N5G I.F. Amplifier. 1N5G I.F. Amplifier. 1H5G Det., A.V.C., 1st A.F. 1Q5G Power.

PEAL 52CB (Continued)

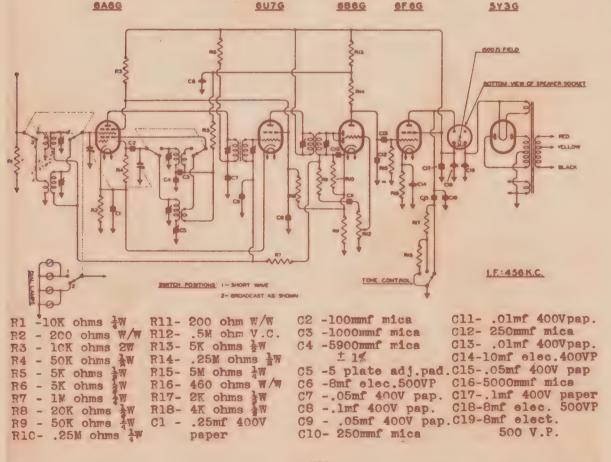
```
R1 -10k ohms 3W
R2 -50K ohms 3W
                   R12- .5M ohms <del>1</del>W R13-.1M ohms <del>1</del>W
                                          C4 -3900mmf mica
                                                                C13-.01mf 400V pap.
                                          plus or minus 1%
                                                                C14-1C00mmf mica
R3 -.25M ohms W R14-.5M ohms VC
                                          C5 -385mmf mica
                                                                C15-4000mmf mica
R4 -5K ohms 3W
                   R15-.5M ohms WW
                                          plus or minus 1%
                                                                C16-250mmf mica
R5 -5K ohms W
                   R16-1M ohma 1W
                                          C6 -1000mmf mica
                                                                C17-.Olmf 400V pap
R6 -2M ohms W
                                          C7 -8mf elec.350VP
                   R17-600 ohms W/W
                                                                C18-25mf elec.40VP
R7 -. 1K ohms W
                                          C8 -.05mf 200V pap
                   R18-50K ohms www
                                                                C19-.1mf 400V pap
R8 -. 1M ohms IW
                   R19-.25M ohms 3W
                                          C9 -. 05mf 400V
                                                                C20-8mf elec.350VP
R9 -2M ohms \ \frac{1}{4}\text{W}
                   Cl -.05mf 200V pap
                                          C10-.05mf 200V
R10-50K ohms &W
                   C2 -.05mf 400V
                                          Cll-.25mf 400V
                   C3 -100mmf mica
R11-1M ohms AW
                                          C12-100mmf mica
```

PLATE		SCREEN		OSC. ANODE			
	VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
	1A7G	83	.35	30	.85	67	0
	1N5G	83	.65	60	.15		0
•	1N5G	83	.65	60	.15	•	0
	1H5G	35	.05				0
	1Q5G	80	6.0	83	.8		-77
a]	L "B"	Battery d	rain, no	signal -	11 M.A.		

Total "B" Battery drain, no signal - 11 M. Total "A" Battery drain - .3 amp.

All measurements taken with switch in short wave position and no signal, and with respect to chassis.

PEAL Chassis Type 6552A



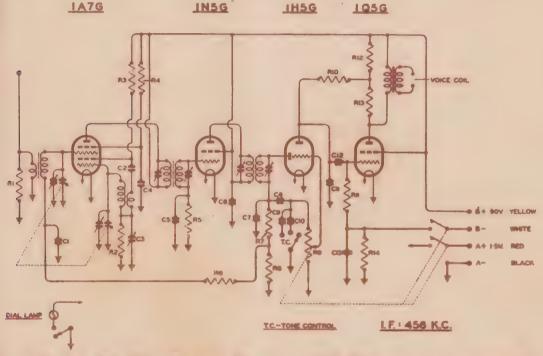
PEAL 6552A (Continued)

	PLATE		SCREEN		OSC .ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
6A8G	190	3.5 ma	95	4.5 ma	150	-4.25
6070	210	6.7 "	95	1.5 "		-4.25
6B 6G	75	.2 *				-1.1
6F6G	200	23.0 "	210	4.0		-13.0
EVEA	Out mu	-200 #0	Ita			

VALVES: 6A8G Converter. 6U7G I.F. Amp. 6B6G Det. AVC 1st A.F. 6F6G - Power. 5Y3G Rectifier.

All measurements made with switch in short wave position and no signal tuned in.

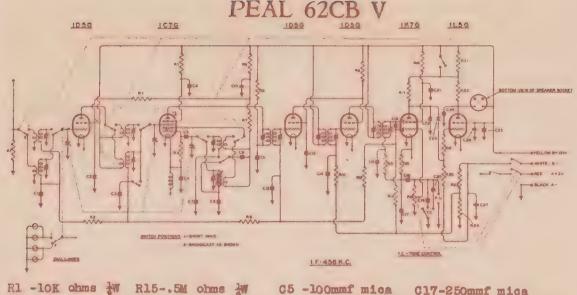
PEAL 41MB



R1 -10K ohms W R225M ohms W	R95M ohms VC	Cl05mf 200V pap C2 -1000mmf mica	
R3 -10K ohms W	7	C3 -5 plate adj.pad	
R4 -50K ohms W R5 -2M ohms W	R115M ohms W	C405mf 400V pap C505mf 200V pap	Cll-250mmf mica Cl20lmf 400V pap
R6 -1M ohms W	R1325M ohms W	C65mf 400V pap	
R75M ohma W	R14-600 ohms W/W	C7 -loommf mica	40V .P.

	PL	ATE	SCI	REEN	OSC	.ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID	VOLTAGE	BIAS
1A7G	83	.5 ma	38	.83 m	a	70	0
1N5G	83	.68 ma	83	.18 "			0
1350	32	.05 ma					0
1956	80	5.5 ma	83	.8 ma			6.5

Total "B" Battery drain, no signal - 10 ma. Total "A" - .25 amp. In earlier releases using a 1056 in lieu of the 1256 shown and the limiting resis.R5 together with its by-pass cond.C5, was not used in the grid circuit of the 1N56. VALVES: 1A76 Convt. 1N56 I.F.Amp.1H56 det.audio 1256 Power Amp.



```
R2 -. 1M ohms
                  R16-.5M ohms VC
                                      C6 -.05mf 400Vpap C18-.0lmf 400V paper
R3 -30K ohms
                                                         C19-1000mmf 400V pap.
                  R17-.25M ohms &W
                                      C7 -4900mmf mica
R4 -50K ohms
                  R18-1M ohms W
                                      plus or minus 1%
                                                         C20-4000mmf 400V pap
R5 -50K ohms W
                  R19-50K ohms
                                      C8 -385mmf mica
                                                         021-.05mf 400V paper
R6 -5K ohms
                  R20-1M ohms 1W
                                      plus or minus 1%
                                                        C22-250mmf mica
R7 -5K ohms W
                  R21-30K ohms
                                      C9 -1000mmf mica
                                                         C23-.Olmf 400V paper
R8 -. 1M ohms W
                  R22-.25M ohms &W
                                      Clo-8mf elec.350VPC24-2000mmf mica
R9 -5K ohms W
                  R23-130 ohms W/W
                                      C11-.05mf 400V papC25-.1mf 400V pap
C12-.05mf 400V " C26-amf elect.
R10-.1M ohms
                  R24-180 ohms W/W
                  C1 -.05mf 400V pap C13-.05mf 400V
Rll-.lM ohms W
                                                                  350VP
R12-1M ohms W
                  C2 -. 05mf 400V
                                      C14-.05mf 400V
                                                         C27-25mf elect.
R13- . lM ohms W
                  C3 -.05mf 400V
                                      C15-100mmf mica
                                                               40 V.P.
R14-1M ohms AW
                  C4 -. lmf 400V pap. C16-100mmf mica
```

	PL	ATE	SCI	reen	OSC .ANODE		
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS	
1D5GP	130	2.4 ma	67	1.0 ma		-3.2	(RF Amp.)
1070	120	2.2 "	42	1.6 *	90	-3.2	
ID5GP	130	1.0	47	.3 *		-3.2	(lst IF)
1D5GP	130	1.0 *	47	.3 *			(2nd IF)
1K7G	40	.3 ^N	20	.1 "		0	
1L5G	128	4.0 "	130	1.0 "		5.6	

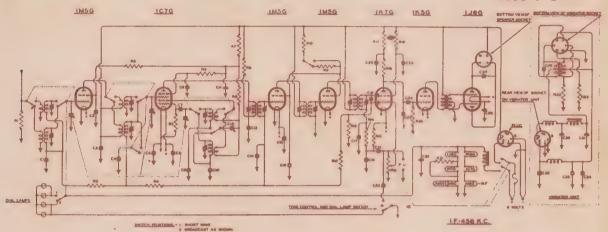
Total B Battery drain with no signal 17 M.A. Total "A" without dial lamps .66 amp. VALVES: 1D5GP RF Amp. 1C7G Converter. 1D5GP 1st IF Amp. 1D5GP 2nd IF amp. 1K7G det. AVC. 1st AF. 1L5G Power. All measurements made with switch in short wave position and no signal tuned in, so that A.V.C. will not function and affect operating voltages and currents. All voltages are with respect to chassis.

PEAL 72CV

R1 -10K ohms W	R8 -5K ohms W	R155M ohms AW	R22-200 ohms & Watt
R2 1M ohms W	R9 -5K ohms &W	R165M ohms VC	R23-200 ohms & Watt
R3 -50K ohms W	R1025M ohma W	R17-10K ohms W	Cl C5mf 400V paper
R4 LM ohms W	R1125% ohms &W		C205mf 400V paper
R5 -50K ohms aw	R12-1M ohms WW	R19-1M ohms W	C3lmf 400V paper
R6 -50K ohrs W	R13-1M ohms in	R205M ohms W	C4 O5mf 400V paper
R7 -5K ohms W	R141M clome W	R21-16.5 ohms W/W	C5lmf 400V paper

A PEAL 72CV (Continued)

06 -. lmf 400V pap C12-100 Cmmf mica C20-.lmf 400V pap C28-100mf elec.12VP C7 -loommf mica Cl3-.05mf 40CV pap C21-.01mf 40CV " C29-.02mf mica C8 -. 05mf 400V pap C14-. 05mf 400V pap C22-2000mmf mica 1500VT C15-.lmf 400V pap C23-.05mf 400V pap C16-.05mf 400V pap C24-.01mf 400V pap C9 -3900mmf mica C30-8mf elec.500VP plus or minus 1% C31-8mf elec. " " Clo-385mmf mica C17-250mmf mica C25-250mmf mica C32-,25mf 400V pap plus or minus 1% Cl8-250mmf mica C26-1000mf elec.12vp C33-.25mf 400v pap Cll-amf elec.35QVP Cl9-100mmf mica C27-2000mmf mica C34-.Olmf mica 1500 V.T.



	PL	ATE	SCI	REEN	OSC .ANODE	
VALVE	VOLTAGE	CURRENT	VOLTAGE	CURRENT	GRID VOLTAGE	BIAS
1M5G	137	2.6 ma	65	.85 ma		0
1C7G	130	.85 ma	45	1.4 ma	90	-2
1M 5G	137	.Z ma	30	.22 ma		0 (lst IF)
1M5G .	137	.7 ma	30	.22 ша		0 (2nd IF)
1K7G	45	.25 ma	30	.l ma		-2
1K5G	132	3.5 ma				-4
1J6G	135	1.0 ma				-4
T100	135	1.0 ma				-4

Total "B" Current drain with no signal 16 m.a. Total "A" current drain, without pilot lamps 1.15 amp.

All measurements taken with switch in short wave position and no signal tuned in, so that AVC will not function and affect operating voltages and currents - all voltages with respect to chassis.

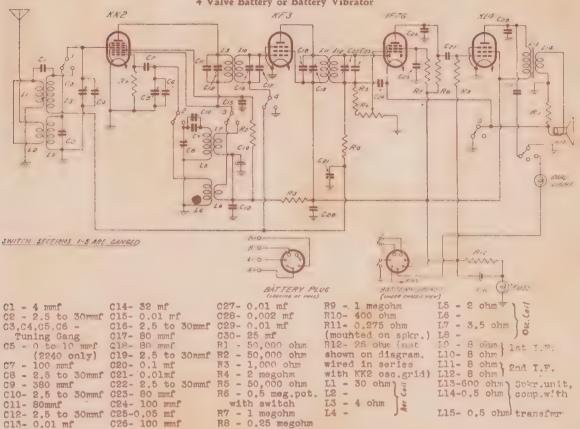
NOTE: Bias measurements for any valve are taken between that valve's negative filament and the point on the series filament system to which its own grid return is connected.



PHILIPS RADIO
Manufactured by Philips Lamps (A'sia) Pty. Ltd., Sydney, N.S.W.

PHILIPS 1840 & 2240

4 Valve Battery or Battery Vibrator



VALVE	PLATE	SCREEN	BIAS F	ILAMENT
	VOLTAGE	VOLTAGE	VOLTAGE	VOLTS
KK2	120	55	0	5
KF3	130	130	0	2
1F7G	30	20 .	0	2
KL4	125	130	5	2

VOLTAGE ANALYSIS

TUNING RANGES: 1,550 to 540 Kc/s. 8 to 22 Mc/s. INTERMEDIATE FREQ.: 472.5 Kc/s.

These voltage values with the exception of blas These voltage values with the sately voltages are measured between the socket points indicated and chassis with receiver in no signal and the volume control at zero. Risa condition and with volume control at zero. Bit voltages are to be measured at the source of t voltage, as incorrect readings will otherwise obtained. Voltages are measured with a 1,000 per volt voltmeter and may vary as much as from the figures quoted.

BATTERY EQUIPMENT: Por Battery Operation: 1-2 volt accumulator (100 amp.hrs. capacity). 3-45 volt triple capacity "B" Batteries. For Battery Vibrator Operation: (with Type 220 Vibrator Unit.). 1-6 Volt accumulator (100 amp.hrs.capacity). VIBRATOR OPERATION - Models 1840 and 2240 are intended for operation either with "B" batteries or alternatively with Philips Model 220 Vibrator Unit. It is important to note that under no circumstances should the Type 146 unit be used with the 1840 or 2240 Receivers. If it is desired to use the 220 vibrator unit in place of "B" batteries, reference should be made to the instructions accompanying the Vibrator unit. The switch on the 220 unit must be adjusted to position "A" to adapt the unit to an 1840 or 2240 Receiver. It is also necessary to change the dial panel lamp to a 6.3 volt 0.1 amp. type.

amp. type.

BATTERY CONSUMPTION: "B" Battery Operation: "A" Battery: 0.38 amp. approx. "B" Battery: approx. Battery Vibrator Operation - "A" Battery: 1.1 amp @ 6 volts. VALVE EQUIPMENT: Conv. KK2 Octode. I.F. Amp. KF3 R.F. Penthode. Demod. & 1st Audio 1F7G D.D. Penthode. 74mA Freq. Power Amp. KL4 Fower Penthode.

PHILIPS 1840—MODIFICATION

The changes in this set apply to all 1840 with Serial numbers greater than 1501. VALVES: KK2G is used instead of previous KK2. KL4G is used instead of previous KL4. R6 - 0.5 megohm pot. R7 - 1 megohm resistor. C7 - 35 mmf condenser.

In other respects, Radioplayer Model 1846's of the abovementioned Serial Numbers are identical with those of lower Serial Numbers and the original parts list may be used to identify parts not mentioned on this sheet.

PHILIPS 2240-MODIFICATION

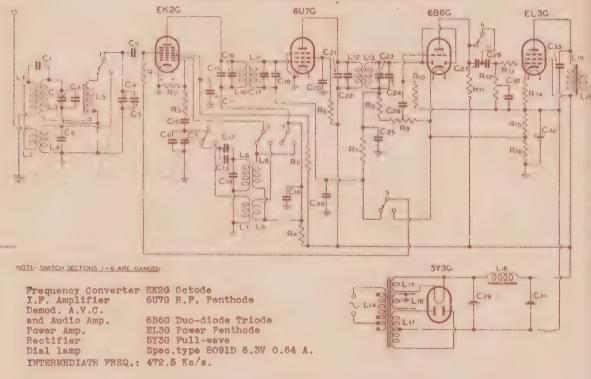
The changes shown apply to all 2240 with Serial Numbers as specified below. SERIAL NUMBERG 1501 to 2250. VALVES: KK2G is used instead of previous KK2. KL4G is used instead of previous KK4. R6 - 0.5 megohm pot. with switch. R7 - 1 megohm resistor. C7 - 35 mmf condenser. In other respects, Radioplayer Model 2240's of the abovementioned Serial Numbers are identical with those of lower numbers, and the original parts list may be used to identify parts not mentioned on this page.

PHILIPS 2240-MODIFICATION No. 2

The changes shown apply to all 2240 radioplayers with serial numbers greater than 1750. C31 - Condenser 10 mmf (Wired between grid and plate of KL4G. C29 - Condenser 0.02 mf

PHILIPS 1852

A.C. Operated for Broadcast and Short Wave Reception



Clo- 100 mmf Cll01 mf NOTE: C34, which d	C13- 420 mmf C14-2.5-30 mmf C15- Part of Coil 42/315 C16-2.5-30 mmf C17- 2.5-30 mmf	42/315 C1901 mf C2001 mf C21- Part of co11 42/419 C22- 2.5-30 mmf	42/419 C25-100 mmf C2601 mf C27001 mf	
and chassis.		15- 100 ohm		
		16- 125 ohm	L6 -2.5 ohm	L14- Power trans.
		1 - 30 ohms	L7 - Bandpass L8 - & Osc.	115 4
R4 - 10,000 ohm R	111- 0.25 meg. L	2 (Aer	18 - & 08C.	L16 - "
R5 - 150,000 ohm R	12- 0.5 meg.pot. L	3 - 4.0 ohm co11	L9 - coils	L17 -) " "
R6 - 60,000 ohm R	113-50,000 ohm L	4 -	Lll- 7.5 ohm 1st IF	
F7 - 1 megohm R	114- 3.50 ohm t.	10- 7.5 ohm 1st IF	L12- 7.5 ohm and IF	L20 -0.5 ohm Jtrans.
VALVE PLATE SCRE	EEN BIAS HEATER		tage values, with the	
VOLTAGE VOLT	rage voltage voltag	E voltages, are n	measured between the s	ocket points indic-
	(AC	head and chassi	a, with the receiver	in the no signal

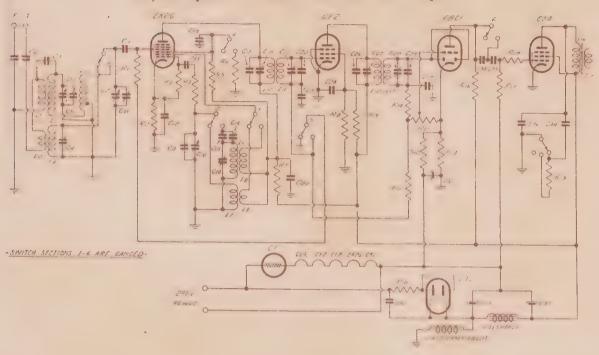
EK2G 200 55 (osc.p. 200V) 607G 245 6.3 6B6G 100 -1.5 6:3 245 -5.5 6.3 EL3G 220 300 volts A.C.per plate 5.0 5Y30

NOTE: These voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis, with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage as incorrect readings will otherwise be obtained. Voltages are measured with a 1,000 ohm per volt V/m and may vary as much as 10% from the figures quoted.

VOLTAGE RATING (Power Supply) 220 to 260 volts A.C.
TUNING RANGE: 1,550 to 540 kc. 8 to 22 Mc/s.

PHILIPS 1868 & 2268

A.C./D.C. Operated for Broadcast and Short Wave Reception



C101 mf	C1901 mf	C34001 mf C3501 mf	R12- 180 ohm R13- 12 ohm	L8) - Osc. and Band- L9) - pass coils
C201 mf	C21- 2.5-30 mmf	C36004 mf	R14- 50,000 ohm	
C4 - 2.5-30mmf		C37-32 mf	R15- 0.5 meg.pot.	L10- 7.5 ohms lat I.F.
C5.C6.C7.C8 &	Coll 42/315	C3802 mf	R16- 0.25 meg.	
Clo-Tuning Gan		C3901 mf	R17- 1 megohin	L12- 7.5 ohmeland I.F.
C9 -0-10 mmf	C2401 mf	R1 - 1 meg.	R18- 50,000 ohm	L13- 7.5 ohms
C11-100 mmf	026-Part of	R2 - 500 ohm	R19- 10,000 ohm	220 . so villio,
C1201 mf	Coll 42/419	R3 - 50,000 ohm	R20- 500 ohm	L14- 7500 ohms) Spkr.
C13-100 mmf	027-2.5-30 mmf	R4 - 25 ohm	R21- 500 ohm	Ll6- comp.
C14-2.5-30mmf	C28-2.5-30 mmf	R5 - 60,000 ohm	L1 - 30 ohms 3	L17- with
C15-420 mmf or		R6 - 50,000 ohm	L2 -	trans.
400 mmf	Coil 42/419	R7 - 5,000 ohm	L3 - 4.0 ohms / Aer	
C16-2.5-30 mmf		R8 - 0.25 meg.	L4 - JC011	L15- 250 ohm (Filter
C17-Part of	C31-25 mf	R9 - 0.1 meg.	L5 - 3.5 ohm; Osc.&	Choke)
Co11 42/315	C3201 mf	R10- 60 ohm	L6 - 2.5 ohm Band -	
C18-2.5-30 mmf	C33-32 mf	R11- 1 meg.	L7 - pass coil	
		lter system. R20	and R21 are part of	dial lamp filter avatem

VALVE	PLATE	SCREEN	BIAS	FILAMENT	These voltage values, with the expution of
	VOLTAGE	VOLTAGE	VOUTAGE	VOLTS	bias voltages, are measured between the sock-
EK2G	200	100 (B/C)	3 (B/C)	6.3	et points indicated and chassis with the
	(osc.p.200V) 60 (S/W)	2 (3/W)		receiver in the no signal condition and with
CF2	240	80	1	13.0	volume control at zero. Bias voltages are to
CBCL	20	-	0	13.0	be measured at the source of the voltage, as
CL4	225	240	10	33.0	incorrect readings will otherwise be obtained.
CAS	-		40	30.0	Voltages are measured with a 1,000 ohm per
	1				voltmeter and may vary as much as 10% from
INTERM	EDIATE FREO.	: 472.5 Kc/	9.		the figures quoted.

INTERMEDIATE FREQ.: 472.5 KC/s. 5 kc/s. 5 kc/s. 5 kc/s. 6 kc/s. 7 kc/s. 7 kc/s. 7 kc/s. 7 kc/s. 7 kc/s. 7 kc/s. 8 kc/s. 7 kc/s. 7 kc/s. 7 kc/s. 8 kc/s. 7 kc/s. 7 kc/s. 8 kc/s. 7 kc/s. 7 kc/s. 8 kc/s. 8 kc/s. 7 kc/s. 8 kc/s. 8 kc/s. 7 kc/s. 8 kc/s

PHILIPS 1868 & 2268—MODIFICATIONS

Changes detailed herewith apply to all 1868 and 2268 Radioplayers with Serial numbers greater than 1150. The circuit diagram remains unaltered.

R4 - .50 ohm.

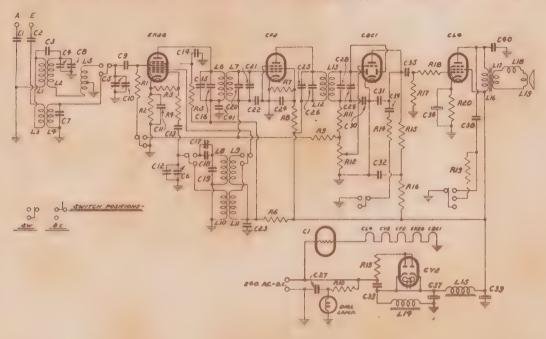
C17, 22, 26, 29 - 80 mmf

C9 - 2.5-30 mmf

Modification No. 2 for Model 2268 appears over page.

PHILIPS 2268-MODIFICAT ON No. 2

The revised data contained on this page applies to Model 22:8 with Serial Numbers greater than 1300. For sets of lower Serial Number than 1301, please refer to Modification appearing on previous page, which concerns Serial Numbers from 1150 onwards.



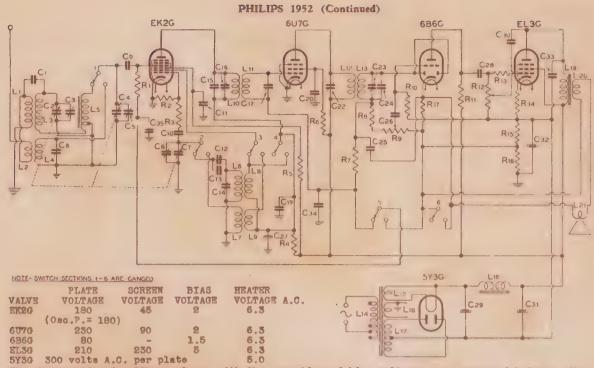
```
Ll, L2, L3 & L4 - Aer-
                                                                        R6 - 5,000 \text{ ohm} R7 - 0.25 \text{ meg.}
C1 - 0.01 mf
                        C17- 2.5 to 30mmf
                                                  032- 0.25mf
                                                   C33- 0.01mf
C2 - 0.01 mf
                         C18- 420 mmf
C5 - 8 mmf
                         C19 - 2.5 to 30mmf
                                                  C34-0.01mf
                                                                         R8 - 0.1 meg.
                                                                                                L5, L8, L9, L10, and L11-
C4,C5,C6 -
                                                  C35-0.01 mf
C36-25 mf
                                                                         R9 - 2 megohm
                         C20- 80 mmf
                                                                                                 Bandpass & oscillator
                        C21- 2.5 to 30mmf
                                                                         R10- 500 ohm
                                                                                                 0011
Tuning Gang
C7 - 0 to 35mmf
                                                                        R11- 50,000 ohm
R12- 0.5meg.pot.
                                                                                                L6 and L7 - 1st I.F.
L12 and L13- 2nd I.F.
L16 & 17 - 3pkr.output
                         C22- 0.01 mf
                                                  C37- 32mmf
C38- 0.02mf
                        023- 0.01 mf
C8 - 0 to 25mmf
                                                                        R13- 60 ohm
R14- 25,000 ohm
C9 - 100 mmf
C10- 0 to 10mmf
                                                  C39-32 mf
                        C24- 0.01 mf
                        C25- 2.5 to 30mmf
                                                  C40- 0.004mf
                                                                                                               transformer
                                                                                                L14, L16, L17, L18 and
L19 - Speaker complete
L15 - Choke, 250 ohm
C11- 0.01 mf
                         C26- 80 mmf
                                                   C41- 0.01 mf
                                                                         R15- 0.25 meg.
                                                                        R16- 50,000 ohm
R17- 0.5 meg.
C12- 0 to 10mmf
                         C27- 0.01 mf
                                                   R1 - 1 meg.
C13- 100 mmf
                         C28- 80 mmf
                                                   R2 - 500 ohm
                                                                        R18- 50,000 ohm
R19- 10,000 ohm
                        C29- 2.5 to 30mmf
                                                  R3 - 50,000 ohm
R4 - 50 ohm
C14- 0.01 mf
C15- 2.5 to 30mmf
                                                                        R20- 200 ohm
C16- 80 mmf
                        C31- 100 mmf
                                                  R5 - 0,1 meg.
```

PHILIPS 1952 A.C. Operated for Broadcast and Short Wave Reception

```
C17- Part of coil R1 - 1 megohm
42/319 R2 - 50,000 ohm
C1 - 8 mmf
                                                             R16- 125 ohm
R17- 4.5 " o:
                                                                                    L10- 8 ohm } 1st I.F.
                                                                          of
C2.C4.C7 -
                                                             27 S.W.G. Eureka
Tuning Gang
C3 - 0-25mmf
                   C19- 0.01 mf
                                        R3 - 25 ohm
                                                                                    L12- 8 ohm | 2nd I.F.
                  C20- 0.01 mf
C23- 2.5-30mmf
                                        R4 - 10,000 ohm
                                                             wire
                                        R5 - 150,000 ohm
C5 - 0-10mmf
                                                             L1 - 30 ohm
                                                                                    L14- Power Trans.
                                        R6 - 60,000 ohm
                                                             L2 -
C6 - 2.5-30mmf
                  024- 80 mmf
                                                                                    1.15-
                                                                          Aer
                                                             L3 - 4 ohm |coll
C8 - 2.5-30mmf
                  C25- 100 mmf
                                        R7 - 1 megohm
                                                                                    L16-
C9 - 100 mmf
                   C26- 0.01 mf
                                        R8 - 50,000 ohm
                                                                                    L17-
                                                                                            100
                                           - 0.5 meg.pot.
C10- 100 mmf
                   C27- 8 mf
                                        R9
                  C28- 0.01 mf
                                        R10- 1 megohm
Cl1- 0.01 mf
                                                             L5 - 3.5 ohm) Osc.
                                                                                    L18-1500 ohm Spkr. less
L21-0.5 ohm transfmr.
                  C29- 16 mf
                                        R11- 250,000 ohm
C12- 2.5-30mmf
                                                             L6 - 2.5 ohm/&
                                        R12- 0.5 meg.pot.
                  C30- 250 mmf
C13-420mmf
                                                                             Band-
                                        R13- 50,000 ohm
R14- 150 Jill
C14-2.5-30mmf
                  C32- 25 mf
                                                             L8 -
                                                                             pass
                                                                                    L19- 600 ohm | Output
C15- 80mmf
                                                             T.9 -
                                                                             coil
                                                                                    L20- 0.5 ohm transfmr.
                                        R15- 100 ohm
                  C34- 0.01 mf
                                                             C22-Part of Coil
                                                                                    C31- 8 mf
                                                                         42/421
```

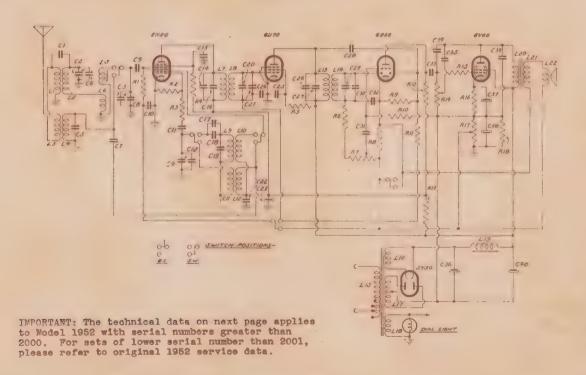
Voltage Rating (Power Supply) 220 to 260 volts A.C. Tuning Range - 1,550 to F40 Ke/s. 8 to 22 mc/s. INT. FREQ.: 472.5 Ke/s.

VALVES: Frequency Converter EK2G Octode. I.F. Amplifier 6U7G R.F. Penthode. Demodulator, A.V.C. and Audio Amplifier 6B6G Duo-diode Triode. Power Amplifier EL3G Power Penthode. Rectifier 5Y3G Full-wave. Dial Lamp 6.3 volt 0.3 amp. Panel Lamp.



The abovementioned voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis, with the receiver in no signal condition and with volume control at zero. Bias voltages are to be measured at the source of voltage, as incorrect readings will otherwise be obtained. Voltages are measured with a 1000 0.P.V. and may vary 10% from fig. quoted.

PHILIPS 1952 (Modified)



PHILIPS 1952-MODIFICATION (Continued)

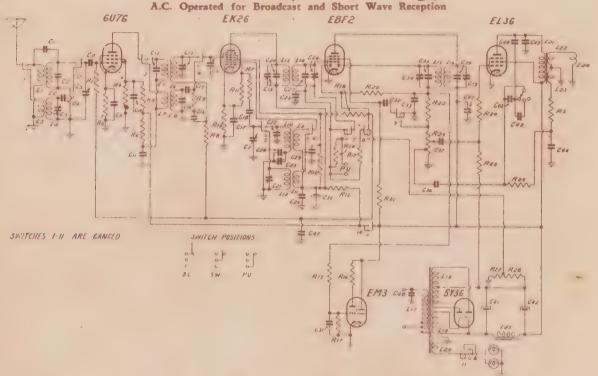
VALVES: Model 1952 of serial numbers less than 2251 employ the following valve types: EK2G, 677G, 676G, EL3G, 5Y3G. Model 1952 of serial numbers greater than 2250 substitute a 6V6G for the EL3G.



L1,L2,L3 & L4 - L5,L6,L9,L10,L11 Aerial Coil & L12 - Osc. and L7,L8 - 1st I.F. Band-pass Coil

L13,L14 - 2nd I.F. Coil L15,L16,L17 & L18-Power Trans. L20, L21 - Output Transformer L20,L21 & L22 -Spkr. complete with transformer

PHILIPS 2052 (With R.F. Stage)



VALVE	PLATE		DUREEN	DIAG	HEATER
	VOITAGE		VOLTAGE V	TOLTAGE	VOITAGE
					(A.C.)
6117G	210		80	1.5	6.3
EX20	190		45	2	6.3
	(Osc.p.= 19	ov)	•		
EBF2	220		70	0	6.3
EL3G	195	•	220	5.5	6.3
5Y3G	300 v	olts	A.C. per	plate	5.0
EM3			-	40	6.3
C1 - 8	min£	C10-	.01 mf	C18	- 100 mmf
			.01 mf	C19	- 0-30 mmf
- 10		012-	80 mmf	020)- 80 mmf*
		C13-	0-30 mmf	C23	- 0-30 mm?
	C7 - Gang		0-30 mmf	C22	- 0-30 mmf
	ndenser		.0045 mf		5- 0-30 mmf
C8 - 1			.05 mf	C24	- 330 mmf
	Ol mf	C17-	.01 mf	C28	01 mf
			• -		

These voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage, as incorrect readings will otherwise be obtained. Voltages are measured with a 1,000 ohm P/V.meter and may vary as much as 10% from the figures quoted.

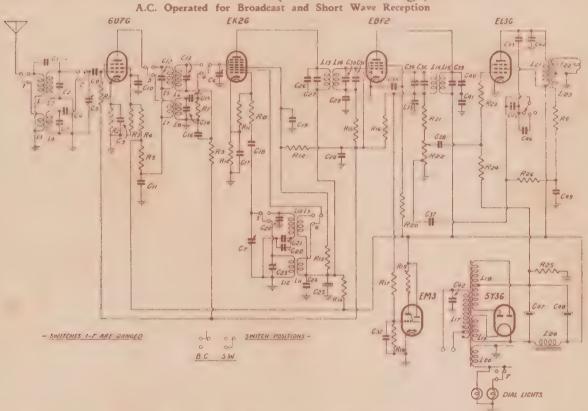
from the	ne Figures	quotea.	
C26-	.01 mf	C34-	0-30 mmf
C27-	80 mmf	C35-	80 mmf
C28-	0-30 mmf	C36-	.03 mg
C29-	.Ol mf	C37-	.01 mf
C30-	8mf elec.	C38-	80 mmf
	.05 mf	C39-	0-30 mmf
C32-	.01 mf	C40-	.01 mf
C33-	100 mmf	C41-	8 mlf

PHILIPS 2052 (Continued)

```
R19- 2 meg. L1 - 30 ohm
R20- 2 meg. L2 - 3.5 *
R21- 100,000 ohm L3 - 3.5 *
R22- 50,000 ohm L4 -
                                                                                                                                      L15- 8 ohm 2nd
C42- 16 mf
                                R6 - 1000 ohm
                                R7 - 50 ohm
R8 - 2 meg.
C43- 100 mmf
                                                                                                                                      L16-8 ohm ]I.F.
                                                                                                                  Aer . Coil
044- .001 mf
045- .002 mf
                                R9 - 0.5 meg.
                                                                                                                                      L17- 37 ohm
046- .03 mf
047- .05 mf
048- .005 mf
048- 400 mmf
                                                              R23-0.5 meg.pot.
tap. at 35,000
                                                                                                                                      L18 - 550 ohm Power
L19 - Trans
                                R10- 500 ohm
                                R11- 50,000 ohm
                                                                                                                  R.F.Coil
                                                                                                                                                              Trans.
                                R12- 150,000 ohm R24- 50,000 ohm
R13- 5000 ohm R25- 1 megohm
                                                                                             1.7 -
                                                                                                                                      L20 -
                                                              R24- 50,000 ohm
R25- 1 megohm
R26- 10,000 ohm
R27- 25 ohm
R28- 75 ohm
L13- 8 ohm lst
L14- 8 ohm IF.
                                                                                             L8 -
                                                                                                                                      L21 - 580 ohm
L22 - 1 ohm
L23- 8 ohm
L24 - 3 ohm
L25 - 1500 ohm
                                R14- 0.5 meg.
R1 - 1 megohm
                                                                                             L10- 2.5 " Osc.Coil
R2 - 150 ohm
R3 - 1500 ohm
                                R15- 5 megohm
                                R16- 1 megohm
R17- 2 megohm
R4 - 30,000 ohm
R5 - 25,000 ohm
                                                                                             Lll-
                                R18- 5 megohm
                                                                                             L12-
```

VOLTAGE RATING (Power Supply) 220-260 volts A.C. TUNING RANGE - 1550 to 540 Kc/s. 8 to 22 Mc. INTERMEDIATS FREQ.: 472.5 Kc/s. VALVES: R.F. Amp. 6U7G R.F. Penthode. Freq. Converter - EK2G Octode. I.F. Amp. & Demod. EBF2 Duo-diode Penthode. Power Amp. EL3G Power Penthode. Rectifier 5Y3G Full wave. Tuning Indicator EM3. Dial Lamp 6.5 volt 0.64 amp. special type 8091D (coloured).

PHILIPS 2252 (With R.F. Stage)



							*
VALVE	PLATE	SCREEN	BIAS	HEATER		voltage values, with	
	VOLTAGE	VOLTAGE	VOLTAGE	VOLTAGE (A.C.)			ween the socket points h the receiver in the no
6U7G	210	80	1.5	6.3		1 condition and with	
EK2G	190	45	2	6.5		Bias voltages are t	
	(Osc.p. =)	190 v.)				e of the voltage, as	
EBF2	220	70	0	6.3			ltages are measured with
EL3G	195	220	5.5	6.3		00 ohm per volt volt	
5Y3G	500 1	volts A.C. P	oer plate		much	as 10 per cent. from	the figures quoted.
EM3	107	•	-	6.3			,
C1 - 8	8 mmf	C901 md	. (01605	mf	C23- 0-30 mmf	C30- 80 mmf
	0-30 mmf	C1001 mi		01701	mf	C2401 mf	C31- 0-30 mmf
	0-30 mmf	Cl101 mi	P (C18- 100	mmf	C25-8 mf elec.	C3205 mf
04 -		C12- 80 mmi	P (01901	mf	C26- 0-30 mmf	C3301 mf
05,06	& C7 -	C13- 0-30 r		020- 0-30		C27- 80 mmf	C34- 0-30 mmf
	cond.	C14- 0-30 t	mmf (021- 330	mmf	C2805 mf	C35- 100 mmf
	300 mme	C35- 0045	mf	022- 0-30	mmf (C29- 01 mf	C36- 80 mmf

PHILIPS 2252 (Continued)

```
R1 - 1 megohm

R2 - 150 ohm

R3 - 30,000 ohm

R4 - 25,000 ohm

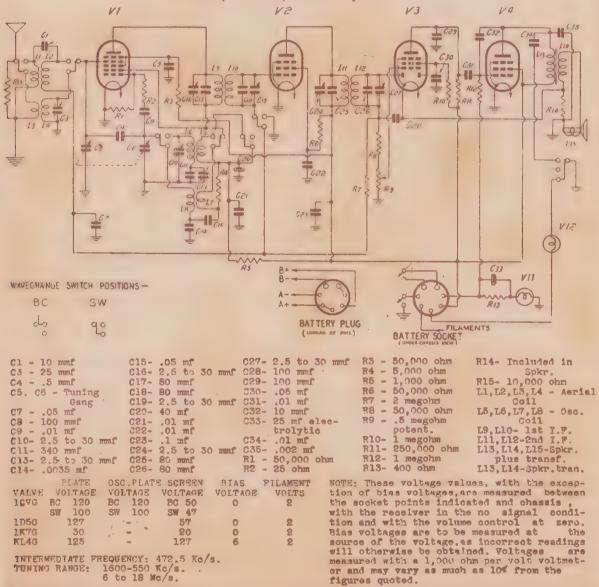
R5 - 1,000 ohm

R6 - 1,500 ohm
                                                    R14- 5,000 ohm
                                                                                   R26- 10,000 ohm
                                                                                                                    L15- 8 ohm lst IF
C38- .01 mf
C39- 80 mmf
                                                                                   L1 - 30 ohm
L2 - 3.5 " (Aer.Coil)
L3 - 3.5 "
                                                    R15- 2 megohm
                                                    P16- 2 megohm
                                                                                                                    L15- 8 ohm and IF
C40- 0-30 mmf
                                                    R17- 5 megohm
                                                                                                                    L16- 8 ohm 15 L17- 37 ohm
                                                    R18- 2 megohm
C41- .01 mf
                                                                                   L4 -
                                                    R19- 1 megohm
C42- .005 mf
                                                                                   L5 - 60 ohm
L6 - 5.5 ohm RF Coil
                                                                                                                    L18- 550 ohm Power
                         R7 - 0.5 megohm
R8 - 50 ohm
                                                   R20- 100,000 ohm
R21- 50,000 ohm
R22- 0.5 meg.pot
C43- .001 mf
                                                                                                                    7.19-
                                                                                                                                       Trans.
C44- .002 mf
C45- 100 mmf
                                                                                   L7 -
                                                                                                                    L20-
                         R9 - 2 megohm
                                                                                   L8 -
                                                                                                                    L21- 720 ohm
C46- 400 mmf
                         R10- 500 ohm
                                                    tap. at. 35,000
                                                                                   L9 - 1 ohm
                                                                                                                    L22-'1 ohm
                        R11- 50,000 ohm
R12- 5 megohm
R13- 150,000 ohm
                                                                                   110- 2.5 ohm osc.Coil
                                                   R23- 50,000 ohm
R24- 1 megohm
C47- 8 mf
                                                                                                                   L23- 46 ohm
L24- 1500 ohm
C48- 16 mf
                                                                                   Lll-
                                                   R25- 100 ohm
C49- .03 mf
                                                                                   L12 -
```

VOLTAGE RATING (Power Supply) 220-260 volts A.C. (also special 110 volt models).
TUNING RANGE - 1550 to 540 Kc/s. 8 to 22 Mc/s. INTERMEDIATE FREQ.: 472.5 Kc/s.
VALVES: P.F. Amp. 6U7G R.F. Penthode. Freq. Converter EK2G Octode. I.F. Amp. & Demod. EEF2 Duo-diode Fenthode. Power Amp. FL3G Power Fenthode. Rectifier 5Y3G Full Nave
Tuning Indicator EM3. Dial Lamp 6.5 volt 0.64 amp. special type 8091D (coloured).

PHILIPS 1940



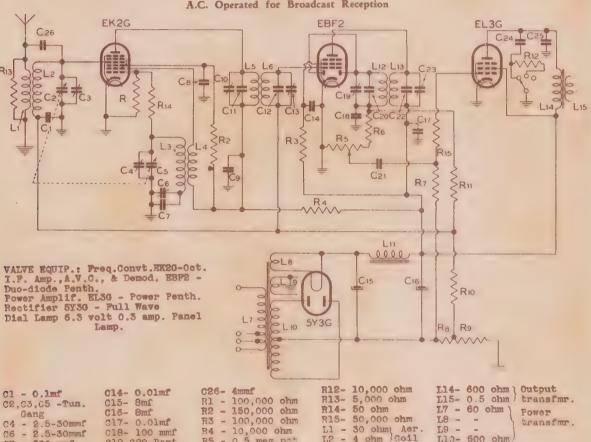


BATTERY EQUIPMENT: 1-2 Volt Accumulator (100 amp. hours capacity.) 3-45 Volt Super Service "B" Batteries. BATTERY CONSUMPTION: 2 Volt "A" Battery; 0.44 amp. approx. "B" Battery; 14 milliamp. approx. 6 Volt "A" Battery (in conjunction with Viorator Unit) 1.1 amp. approx. VALVE EQUIPMENT: Frequency Converter - 1076 Octode (V1). I.F. Amp. 1056 R.F. Pentode (V2). Demodulator and 1st Audio 1k76 Duo Diode Pentode (V3). Power Amplifier KL46 Power Pentode (V4). Dial Lamps (V12). For "B" Battery Operation 2.5 volt 0.32 amp. For Vibrator Operation 6.3 volt INSTRUCTIONS FOR VIBRATOR OPERATION: This model is intended for operation with either "B" INSTRUCTIONS FOR VIBRATOR OPERATION: This model is intended for operation with either "B" Batteries, or, alternatively, with Philips Model 148,220 or 330 vibrator unit. Where it is desired to use a unit in place of "B" batteries, reference should be made to the instruction sheet supplied with each unit. The switch on the vibrator units, if used in conjunction with Model 1940, should be set as follows: - Unit 148 - Position 6510 Unit 220 - Position B Unit 330 > Position B It is also necessary to change the dial panel lamp to a 6.3 volt type.

FUSE LAMP (V11). A fuse lamp is fitted in series with the "B" battery negative battery lead as a measure of protection against valve filament burnouts. The set will not operate if the lamp is fused or not properly screwed into the socket. The correct replacement fuse lamp is of the volt 0.3 amp. type.

PHILIPS 1941

A.C. Operated for Broadcast Reception



	C14- 0.01mf	C26- 4mmf	R12- 10,000 ohm	L14- 600 ohm } Output
C2.03.05 -Tun.	C15- 8mf	R1 - 100,000 ohm	R13- 5,000 ohm	L15- 0.5 ohm transfmr.
00,00,00	C16- 8mf	R2 - 150,000 ohm	R14- 50 ohm	L7 - 60 ohm) Power
Gang		R3 - 100,000 ohm	R15- 50.000 ohm	
	S17- 0.01mf			L9 transfmr.
C6 - 2,5-30mmf	C18- 100 mmf	R4 - 10,000 ohm	L1 - 30 ohm; Aer.	
07 - 530 mmf	C19, C20-Part	R5 - 0.5 meg.pct.	L2 - 4 ohm Go11	L10- 600 ohm)
0. 00-		R6 - 50,000 ohm	13 - 2.5 " Osc.	L11- 1500 ohm
08 - 0.1 mf	of coll unit		L4 - 3.5 " Co11	1.7%
C9 - 0.01 mf	C21- 0.004mf	R7 - 1 megohm		
Clo- 2.5-30 mmf	C22- 80 mmf	R8 - 75 ohm	1.5 - 8 ohm lst IF	Voice Coil - 0.5 ohm
010 200 00 1111	C23- 2.5-30mmf	R9 - 45 ohm	re - s oum	
C11- 80 mmf		R10- 1 megohm	112- 8 ohm:	
C12, C13 - Part of	C24- 0.02 MI		L12- 8 ohm 2nd TP	
coil unit	C25- 0.004 mf	Rll- 2 megohm	PT9= Q OUR	

VOLTAGE RATING (Power Supply) 220-250 volts A.C. 40-60 cycles. Tuning Pange - 1,550 to 540 Kc. Intermediate Frequency - 472.5 Kc/s.

	PLATE	SCREEN	BIAS	HEATER
VALVE	VOLTAGE	VOLTAGE	VOLTAGE	VOLT. (A.C.)
EK2G	190	50	2	6.5
EBF2	230	80	2	6.3
EL3G	210	230	5	6.3
		4.0	-9 -6-	E 0
5Y3G	300	A.C. per	brara	5.0

NOTE: These voltage values with the exception of biss voltages are measured between the points indicated and chassis with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of voltage, as incorrect readings will otherwise be obtained. Voltages are measured with 1,000 O/P/V and may vary as much as 10%.

PHILIPS 1941—MODIFICATIONS

The changes in this set apply to all Model 1941's with Serial Numbers greater than 3,600, except where otherwise stated.

C2, C5 - Tuning Gang C3 - 0-25 mmf

C1 - 8 mmfd

8+16 mf C19- 2.5-30mmf

R3 - 150 ohm

R4 - 50,000 ohm R5 - 100 ohm

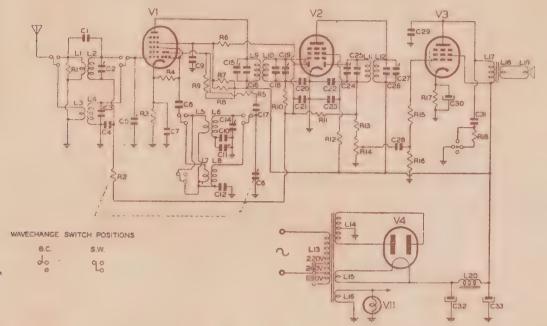
R6 - 10 megohm
R7 - 50,000 ohm
R8 - 50,000 ohm
R9 - 30,000 ohm
R10- 2 megohm

R11- 2 megohm R12- 100,000 ohm R13- 50,000 ohm

C20 - 80 mmf R11- 5 megohm

PHILIPS 1942

A.C. Operated for Broadcast and Short Wave Reception



C2 - 25 mmfd	C15- 2.5	to 30mmfd	C26-	80 mmfd	
C3 - 25 mmfd	C16- 80	mmfd	C27-	2.5 to 30mm	ra
C405 mfd	C17- 100	mmfd	C28-	.004 mfd	
C5.C6-Tun.Gang	.C18- 80	umfd	C29-	.004 mfd	
C71 mfd	C19- 2.5	to 30mmfd	030-	25mfd elect	
C8 - 100 mmfd	C2001	. mfd	C31-	.02 mfd	
C901 mfd	C2105	mfd .	C32-	16 mfd elec	t.
C10- 290 mmfd	C22- 100	nmfd	C33-	16mfd elec	t .
Cll- 2.5-30mmfd	C2301	. mfd	Rl -	5,000 ohm	
Cl20045 mfd	C24- 2.5	to 30mmfd	R2 -	150,000 ohm	
PLATE	OSC.PLATE	CODEEN	DTAC	HEATER	30
				VOLTS.A.C.	
ECH4G 220	75	95	2.5	6.3	- t
EBF2G 220	-	60	0	6.3	8
		220		6.3	C
		plate		5.0	2
					- 1

C14- 2.5 to 30mmfd C25- 80 mmfd

NOTE: These voltage values, with the exception of bias voltages, are measured be-tween the socket points indicated and chassis with the receiver in the no signal condition and with the volume control zero. Blas voltages are to be measured at the source of the voltage, as incorrect readings will otherwise be obtained. Volt-ages are measured with a 1,000 0/P/V and may vary as much as 10% from the figures quoted.

R15- 50,000 ohm

R16- 1 megohm R17- 150 ohm R18- 10,000 ohm L1,L2,L3,L4 - Aerial

L5,L6,L7,L8 - Oscilla-tor Coil L9,L10- 1st I.F. L11,L12- 2nd I.F.

Coil

Voltage Rating (Power Supply) 220-250 volts A.C. Tuning Range - 1600 to 550 Kc/s. 6 to 18 Mc/s. Intermediate Frequency 472.5 Kc/s.

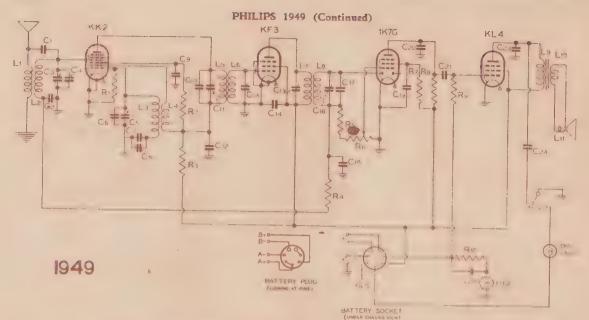
VALVE EQUIPMENT: - Freq. Convt. ECH4G Octode (V1). I.F. Amp., A.V.C., and Demod. EBF2G Duo-dio-de Penthode (V2). Fower Amp. EL3NG Power Penthode (V3). Rectifier 5Y3G Full Wave (V4). Dial Lamp 6.3 volt 0.32 amp. Panel Lamp (V11).

PHILIPS 1949

Battery or Battery Vibrator Operated

	PLATE	SCREEN	BIAS	FILAMENT	NOTE: The
VALVE	VOLTAGE	VOLTAGE	VOLTAGE	VOLTS	bias vol
KK2	120	55	0	2	points in
KF3	130	130	0	2	the no si
1X7G	30	20	0	2	at zero.
KL4	125	130	5	2	scurce of otherwise
					9 7.030 6

ese voltage values with the exception tages are measured between the socket ndicated and chassis with the receiver in ignal condition and with the volume control Bias voltages are to be measured at the the voltage, as incorrect readings will be be obtained. Voltages are measured with O/P/V and may vary as much as 10%. the will



C11- 2.5-30 mmf C12- 0.01 mf C13- Part of coil unit 42/518 C14- 0.1 mf C15- Part of coil unit 42/417 C16- 2.5-30 mmf C17- 80 mmf R3 - 1,000 ohm R4 - 2 megohm R5 - 50,000 ohm R6 - 0.5 meg.pot. L2 - Aerial Coil C1 - 4 mmf C2 - 0.05 mf C3,C4,C5 -Tun. C18- 100 mmf L3 - Osc. Coil L4 - Osc. Coil L5 - lst I.P. C19 - 0.05mf C20- 100 mmf Gang 021- 0.01 mf R7 - 1 megohm L6 - 1st I.F. C6 - 2.5-30mmf C22- 25 mf 17 - 2nd I.F. 18 - 2nd I.F. R8 - 0.25 megohm C7 - 295 mmf C23- 0.002 mf R9 - 1 megohm C8 - 2.5-30mmf C24- 0.01 mf R1 - 100,000 ohm R2 - 50,000 ohm R10- 400 ohm L9 - Output transfmr. 09 - 0.01 mf C10- 80 mmf Ll - Aer.Coil

Tuning Range: 1850-540 Kc/s. Intermediate Freq. 472.5 Kc/s. Battery Equipment: 1-2 volt accumulator (100 amp. hours capacity). 3-45 volt Super Service "B" Batteries.
Battery Consumption: "A" Battery: 0.45 amp. approx. "B" Rattery: 1% milliamp. approx.
Valve Equipment: Freq. Convt. KK2 Octode. I.F. Amp. KF3 R.F. Penhode. Demod. and 1st Audio 1K76 Duo Biode Penthode. Power Amp. KL4 Power Fourbode: That Lamps: For "B" Battery Operation
2.5 volt 0.3 amp. For Vibrator Operation 6.3 volt 0.1 amp.
INSTRUCTIONS FOR VIBRATION: This model is intended for operation either with "B" batteries or, alternatively, with Philips 148 vibrator unit: where it is desired to use this unit in
place of "B" batteries, reference should be made to this instruction sheet supplied with each unit.
Though the 1949 is not mentioned, the same instruction will apply, the switch on the 148 unit
being turned to the 6510/6515 position for operation with 1949 Radioplayer.
FUSE LAMP. A fuse lamp is fitted in series with the "B" battery negative battery lead as
measure of protection against valve filament burnedis. The set will not operate if the lamp is
fused or not properly screwed into the socket. The correct replacement fuse lamp is of the 2.5
volt 0.1 amp. type.

NOTE: For Modifications of this Model see Pages 275 & 276

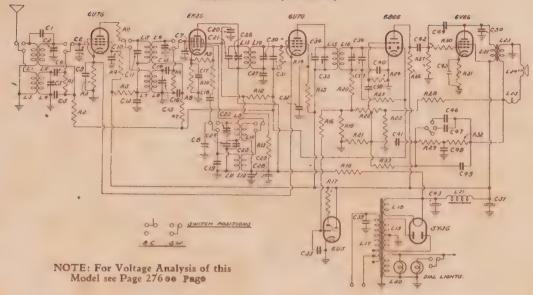
PHILIPS 2262

A.C. Operated for World-wide Reception

VALVE EQUIPMENT: R.F. Amp. 6076 R.F. Penth. Freq.Convt. EK26 Octode. T.F. Amp. 6076 R.F. Penthode Det. and Audio 6866 Duo-diode Triode. Power Amp. 6V66 Beam Tetrode. Tun.Ind.6U5. Dial Lamp 6.5 V. 0.64A. type 8091D.

C1 - 8 mmf C2 - 2.5 to 30mmf C3 - 2.5 to 30mmf C4 - 0.0045 mf C5 - 0.05 mf C6,C7,C8 - 3 Gang C9 - 0.1 mf C10- 0.01 mf C11- 80 mmf C12- 0.01 mf C13- 2.5 to 30mmf C14- 0.0045 mf C15- 2.5 to 30mmf C16- 0.05 mf C16- 0.05 mf C17- 0.01 mf C18- 100 mmf	C20- 0.01 mf C21- 80 mmf C25- 2.5 to 30mmf C25- 2.5 to 30mmf C25- 2.5 to 30mmf C27- 0.05 mf C28- 0.01 mf C29- 8 mf C30- 2.5 to 30mmf C31- 80 mmf C32- 0.01 mf C33- 0.02 mf C34- 80 mmf C35- 2.5 to 30mmf C36- 2.5 to 30mmf	C38- 0.05 mf C39- 0.002 mf C40- 100 mmf C41- 0.07 mf C42- 0.1 mf C43- 8 mf C44- 100 mmf C45- 25 mf C46- 0.05 mf C47- 0.006 mf C49- 0.001 mf C50- 0.002 mf C51- 16 mf R1 - 0.5 meg. R2 - 0.1 meg.	R8 - 500 ohm R9 - 50,000 ohm R10- 25 ohm R12- 10 megohm R13- 0.15 megohm R14- 1 megohm R15- 0.1 megohm R16- 5 megohm R17- 0.5 megohm R19- 0.5 megohm	R21- 0.01 megohm R22- 0.5 megohm pot. (tapped) R23- 2 megohm R24- 2 megohm R25- 25 ohm R26- 0.25 megohm R27- 0.5 megohm R29- 10,000 ohm R39- 10,000 ohm R31- 250 ohm R32- 1,500 ohm R35- 50,000 ohm
C19- 2.5 to 30mm?	C37- 80 mmf	R3 - 100 ohm	R20- 0.25 megohm	

PHILIPS 2262 (Continued)



Voltage Rating (Power Supply) 220-260 volts A.C. (Also special 110 volt models). Tuning Range: 1600 to 540 Kc/s. 8 to 22 Mc/s. Intermediate Frequency: 472.5 kc/s.

PHILIPS 2262A—MODIFICATIONS

The following changes apriy to all Model 2262A's having Serial Numbers greater than 12000.

C24- 340 mmf Condenser. R34- 1 megohm Resistor. C33- .05 mf Condenser. R10- 50 ohm Resistor. R17- 2 megohm Resistor.

Rll is now omitted. R34 is wired across C33. LlO and C41 are shorted out on S/W.

PHILIPS 2351

A.C. Operated for Broadcast Reception

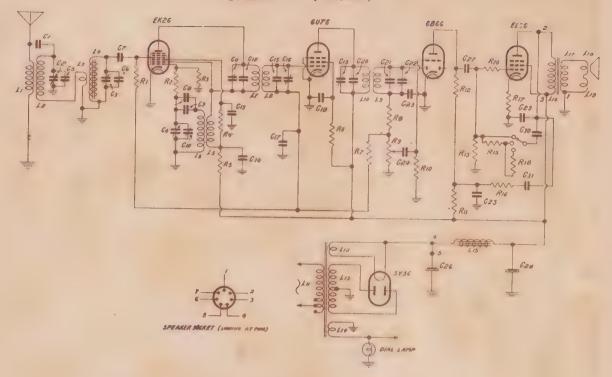
C1 - 8 mmf C2,C3,C4 - Tuning	C16- 2.5-30 mmf C1701 mf	C30- 250 mmf C3101 mf	R13- 0.5 megohm R14- 50,000 ohm	L9 - 8 ohms 2nd I.F. L10- 8 ohms
C5 - 0-25pmf	C1801 mf C19- 2.5-30 mmf	R1 - 0.5 meg. R2 - 50 ohm	R15- 1 megohm R16- 25,000 ohm	L11- Power Transfmr.
C6 - 0-25mmf	C20- 80 mmf	R3 - 50,000 ohm	R17- 150 ohm	L13- "
C7 - 100 mmf	C21- 80 mmf	R4 - 250,000 ohm	R18- 5 megohm	L14- " "
C8 - 2.5-30 mmf	C22- 2.5-30 mmf	R5 - 10,000 ohm	L1 - 30 ohms Aer C1.	
C9 - 400 mmf	C23- 100 mmf	R6 - 60,000 ohm	L2 - 4 ohms " "	L16- 600 ohms
Clo- 0-25 mmf	C2401 mf	R7 - 2 megohm	L3 = =	
Cl1- 2.5-30mmf	C2502 mf	R8 - 50,000 ohm	L4 - 3.5 ohms	
C12- 80 mmf	C26- 16mf elect.	R9 - 0.5 meg.pot.	L5 - ~	
C1301 mf	C27004 mf	R'.0- 2 megohm	L6 - 2.5 ohms	
C1401 mf	C28-8 mf elect.		L7 - 8 ohms	
C15- 80 mmf	C29004 mf	R12- 250,000 ohm	L8 - 8 ohms	

Voltage Rating (Power Supply) 220 to 260 volts A.C. Tuning Pange - 1600 to 540 Kc/s.
Intermediate Frequency - 472.5 Kc/s.
VALVE EQUIPMENT: Freq. Convt. EK2G Octode. I.F. Amp. 6U7G Penthode. Demod. and Audio Amp. 6B6G Duo-diode-triode. Power Amp. EL3G Power Penthode. Rectifier 5Y3G Full Wave. Dial Lamp Special type 809lD 6.3v., 0.64A.

VOLTAGE ANALYSIS

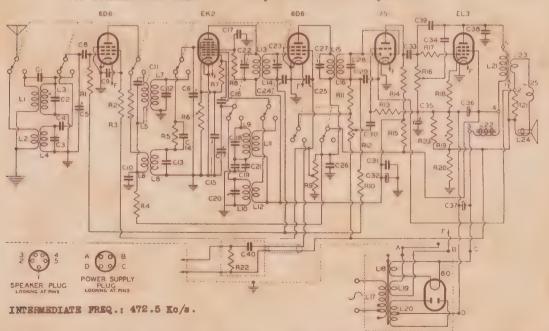
VALVE	PLATE VOLTAGE	SCREEN VOLTAGE	BIAS VOLTAGE	HEATER VOLTAGE	(A.C.)
EK20	180	50	0	6.3	
(Osc.p.= 18	30)			
6070	225	80	0	6.3	
6B6 G	90	-	0	6.3	
EL3G	205	225	5	6.3	
5Y3G	300 vol	ts A.C. po	er plate	5.0	

NOTE: These voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage, as incorrect readings will otherwise be obtained. Voltages are measured with a 1.000 0/P/V Voltages are measured with a 1,000 O/P/V and may vary as much as 10%.



PHILIPS 2462 (A.C. Operated)

For Broadcast and Short Wave Reception and Record Reproduction



Voltage Rating (Power Supply) 220-260 volts A.C. Tuning Range 540-1520 Kc/s. 7-22 Mc/s. (43-13 VALVE EQUIP.: R.F. Amp.6D6 R.F. Penth. Freq.Convt. EK2 Octode. .5m)
I.F. Amp. 6D6 R.F. Penth. Det. & Audio 75 Duo-diode Triode. Power Amp. EL3 Power Penthode.
Rectifior 80 Full-wave. Dial Lamp 6.3 volt 0.3A Panel Lamp.

C1 - 5 maf	C18.C20- Part of	C32- 8 mf	R815 megohm	IS - 4 ohm Aer.Coil
C2.C3 - Part of	oso, coil	C3502 mf	R9 - 25,000 ohm	L5 - 60 ohm
aerial coil	C1900025 mf	C340004 mf	R10- 1 meg.	L7 - 4 ohm
C40045 mf	C21- 12-170 mmf	C35- 25 mf	R11- 0.5 meg.	L9 - 2.5 ohm
C5,C6,C7 - Gang	C22- 12-170 mmf	C36- 16 mf	R125 meg.pot.	L11- 0.5 ohm
condenser	C23- Part of 1st	C37- 16 mf	R15- 1 meg.	L13- 8 ohm
C80001 mf	I.F.	C38004 mf	R1425 meg.	L14- 8 ohm
C905 mf	C2405 mf	C39- 10 mmf	R15- 10,000 ohm	L15- 8 ohm
C1002 mf	02505 mf	C40004 mf	R165 meg. not.	L16- 8 ohm
C11- 50 mmf	C261 mf	R15 mep.	R171 meg.	L17- 20 ohm
C12.C13- Part of	C27- 12-170 mmf	R2 - 1500 ohm	R18- 150 ohm	1.20- 400 ohm
R.F. coil	C28- Part of 2nd	R3 - 25 ohm	R19- 75 ohm	L21- 600 ohm
Cl40045 mf	I.F.	R4 - 1600 ohm	R20- 100 ohm	L22- 1500 ohm
C1508 mf	C290001 mf	R5 - 0.5 megohm	R22- 50.000 ohm	1.23- 0.5 ohm
C160001 mf	C3002 mf	R6 - 500; ohm	R23- 50 ohm	L24- 0.5 ohm
C1702 mf	C3102 mf	R7 - 50,000 ohm	11- 30 ohm (Aer.Coil)	

PICKUP HEAD: To remove pickup head when necessary, first remove motor unit as detailed below. The pickup head can then be astached by withdrawing head-securing acrew underneath supporting arm; unsoldering the earth connection to arm inside same; and feeding the smielded leads through as pick

soldering the earth connection to arm inside same; and feeling the shielded leads through as pick up head is removed. Access to the pickup mechanism can be gained by removing the cover plate on the head, secured by a single screw at the top.

TO REMOVE MOTOR: The motor and tone arm are mounted on a mantel plate fixed to the cabinet shelf by means of wood screws. To remove actor proceed as follows:- (1) Disconnect mains lead.

(2) Disconnect pickup leads from connection plate. (3) Disconnect earth lead. (4) Remove wood screws and lift motor from cabinet. Great care should be taken when handling motor to see that the various parts of the automatic stop mechanism are not subject to unnecessary knocks or strain.

The automatic stop mechanism is located under the turntable. Adjustments should only be made with the greatest care. When a record is playing, the pickup arm moves the circular friction plate which also carries through friction the main trip lever. The trip lever moves toward the main spinile carrying the striker with each revolution of the record, and finally reaches a position where the rubber striker gently wipes the trip lever at each revolution, thus tapping back the trip lever on the friction plate. This continues until the needle reaches the "run" in group of the record, when the suided displacement of the trip lever cooks the trigger and the next revolution of the stelker actuates the stop switch meananism. If the stop falls to uperate at the finish of a record this is probably due to unsufficient friction between the friction disc and tra, lever. Priotion may be increased by edjustment of screw on friction plate. Too much fristion may mass noisy operation of the striker in the form of a knocking noise when the needila nears the end of a record.

It is important than making automatic stop adjustments, to let the pickup run through a record in the normal way, since the stop will operate too soon if moved by hand.

VOLTAGE ANALYSIS

L.O.
0000

NOTE: These voltage values with the exception of bias voltages are measured between with the receiver in the no signal condi-tion and with the receiver Bias voltages are to be measured at the source of the voltage, as incorrect readings will otherwise be obtained. Voltages are measured with a 1,000 ohm per volt volt meter and may vary as much as 10% from the figures quoted.

PHILIPS 2652

A.C. Operated for World-wide Reception

Voltage Rating (Power Supply) 220 to 260 Volts A.G. (Also special 110 volt Models)
Tuning Range 1610 to 540 Ko/s. and 8 to 22 Mc/s. Intermediate Frequency - 472.5 Ko/s Tuning Range 1610 to 540 Ko/s. and 8 to 22 Mc/s.

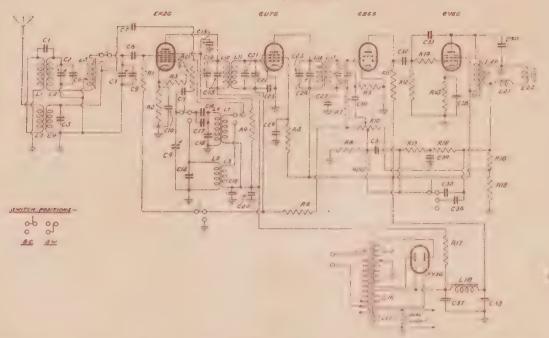
D.D. Triode. Power Amp. 6V60 Beam Tetrode. Rectifier 5Y3G Full Wave. Dial Lemp Special 8091D 6.3 v., 0.64A. VALVE EQUIPMENT: Freq. Convt. EK2G Octode. I.F. Amp. 6076 R.F. Penthode. Demod. and Audio 6869

VOLTAGE ANALYSIS

VALVE	PLATA VOLTAGE	SCREEN VOLTAGE	BIAS
EK2G	200	45	8
6079	230	85	0
636G	80	-	0
EV 8G	210	230	1.0
5Y3G	320 V	olts A.C.	per plate

NOTE: These voltage values with the exception of bias voltages, are measured between the socket points indicated and chassis with the receiver the no signal condition and with the volume control at zero. Bias voltages are measured at source of the voltage, as incorrect readings otherwise be obtained .

PHILIPS 2652 (Continued)



C1 - Smmf 02,C3,C4-Tun.Gang C5 - 25mmf C6 - 25 mmf C7 - Neutralising 08 - 100 mmf 09 - 2.5 to 50mmf C1001 mf C11- 100 mmf C12- 2.5 to 50mmf C1301 mf C14- 2.5 to 50mmf	C2001 mf C21- 80 mmf C22- 2.5 to 30mmf C2305 mf C2401 mf C25- 2.5 to 30mmf	C3005 mf C3107 mf C321 mf C33- loo mmf C3403 mf C3505 mf C36006 mf	C39- 16 mf C40604 mf R1 - 1 megohm R2 - 250 ohm R3 - 50,000 ohm R4 - 150,000 ohm R5 - 100,000 ohm R6 - 2 megohm R7 - 50,000 ohm R8 - 10,000 ohm R9 - 2 megohm R9 - 2 megohm R105 meg.pot.	R11- 250,000 ohm R12- 5 megohm R13- 10,000 ohm R14- 50,000 ohm R15- 253 ohm R16- 1,500 ohm R17- 25,000 ohm R19- 25 ohm R20- 50,000 ohm R21- 25 ohm
---	---	--	---	--

PHILIPS 2652A-MODIFICATIONS

The following changes apply to all Model 2652 Radioplayers having Serial Numbers greater than 2500 .

Aerial is now switched to pass to Li or L3 and the bottom of L3 is permanently grounded. C9 has been removed from across C3 and placed from the grid end of L5 to ground. C41 goes across R13 and R16.
C42 is inserted in the lead between C12 and switch.

G31 is shorted out on short wave .

C7 is now connected from oscillator plate to junction of C3 and C8. C41 - .002mf Condenser C42 - .0045mf Condenser

C41 - .002mf Condenser

PHILIPS 2740

Battery or Battery Vibrator Operated

PHILIPS 2752

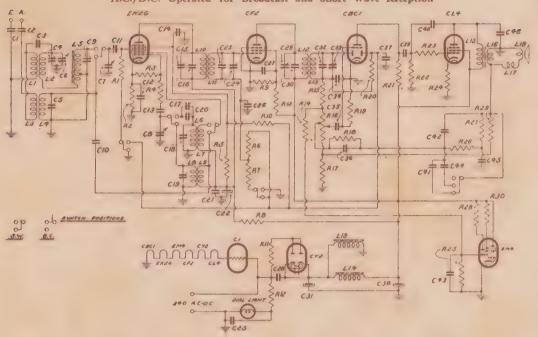
A.C. Operated for World-wide Reception

NOTE: Please refer to Philips Model 2652, which circuit diagram and data apply to this Model with the following amendments to the Condensers and Resistors:-

66 - 2.5 to 30 mmf Clo- 0.01 mf	023- 0.01 mf	032-0.1 mf 034-0.05 mf	040 - 0.004 mf R2 - 500 ohm	Rlo- 0.5 meg. pot. (tapped)
C13- 0.01 mf	030-0.05 mf	035- 0.05 mf	R5 - 60,000 ohm	R16- 1,000 ohm
C20-0.01 mf	031-0.1 mf	C36- 0.006 mf	R12-0.5 megohm	

PHILIPS 2768

A.C./D.C. Operated for Broadcast and Short Wave Reception



C1 - 0.01 mf C2 - 0.01 mf C3 - 8 mmf C4 - 2.5 to 30mmf C5 - 2.5 to 30mmf C6,07,08-Tun.Gang C9 - 2.5 to 30mmf C10 - Neutralising Condenser C11 - 100 mmf C12 - 0.01 mf C13 - 100 mmf C14 - 0.01 mf	C22- 8 mf C23- 80 mmf C24- 2.5 to 30mmf C25- 0.01 mf C26- 0.01 mf C27- 0.01 mf C28- 0.01 mf C28- 0.01 mf	033- 2.5 to 30mmf 034- 100 mmf 035- 0.05 mf 036- 0.1 mf 03705 mf 038- 0.1 mf 049- 0.1 mf 040- 100 mmf 041- 0.05 mf 042- 0.002 mf 043- 0.05 mf 044- 0.06 mf	R3 - 50,000 ohm R4 - 50 ohm R5 - 0.15 meg. R6 - 5 megohm R7 - 5 megohm R8 - 10,000 ohm R9 - 0.25 megohm R11 - 10 megohm R12 - 500 ohm R13 - 0.1 megohm	R16- Potentatr. tapp. R17- 25 ohm R18- 50,000 ohm R19- 2 megohm R20- 2 megohm R21- 0.25 megohm R22- 0.5 megohm R23- 50,000 ohm R24- 200 ohm R25- 5 megohm R26- 10,000 ohm R27- 1,000 ohm R28- 0.5 megohm
				- + /

Voltage Rating (power supply): 195-260 volts A.C. or D.C. Tuning Range: 1600 to 540 Kc/s, 8 to 22 Mc/s. Intermediate Frequency: 472.5 Kc/s.

VALVE EQUIPMENT: Preq. Convt. ER2G Octode. I.F. Amp. CF2 R.F. Penthode. Demod. & Audio C3Cl - Diode Triode. Power Amp. CL4 Power Penthode. Rectifier CY2 Half-Wave. Regulating Lamp Cl - Rarretter.

	PLATE	SCREEN	CATHODE	
VALVE	VOLTAGE	VOLTAGE	VOLTAGE	
EK2G	175	45	2	
(usc.p = 1750			
CF2	235	80	0	
0831	35	-	0	
CL4	230	235	10	

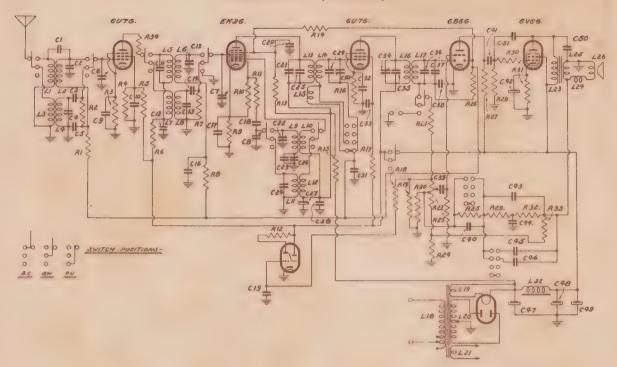
NOTE: These voltage values are reasoned between the socket points indicated and classis, with the receiver in the no signal condition and with the volume control at zero. Voltages are measured with a 1,000 O/P/V and may vary as much as 10%.

PHILIPS 2862

A.C. Operated for World-wide Reception

	PLATE	SCREEN	BIAS	
VALVE	VOLTAGE	VOLTAGE	VOLTAGE	
6U7G	220	95	1.75	
EK20	190	65	2.5 (Osc.p.	190)
6U7G	220	95	1.75	
6B6G	75	-	-	
6V6G	200	225	10	
5Y30	310	Volta A	.C. per plate	100

These voltage values, with the exception of bias voltages are measured between the socket points indicated and chassis with receiver in no signal condition & with volume control at zero. Bias voltages are to be measured at source of the voltage, &s incorrect readings will otherwise be obtained. Voltages are measured with a 1,000 ohm per voltmeter and may vary as much as 10% from the figures quotal.



```
C19- 0.02 mf
C1 - 8 mmf
                                       C36- 80 mmf
                                                           R2 -0.5 meg.
                                                                            R19- 0.25 megohm
C2 - 2.5 to 30mmf C20- 0.01 mf
                                       C37- 2.5 to 30mmf R3 -200 ohm
                                                                             R20- 10,000 ohm
R21- 0.25 megohm
C3 - 0.0045 mf
                   C21- 2.5 to 30mmf C38- 100 mmf
                                                           R4 -30,000"
04 - 2.5 to 30rmf
                   022- 2.5 to 30mmf 039- 0.05 mf
                                                           R5 -25,000"
                                                                             R22- pot .with
                   C23- 330 mmf
C24- 2.5 to 30mmf
05 - 0.05 mf
                                       C40 - 0.1 mf
                                                           R6 -1,000 "
                                                                                switch (tapped)
05,07,08-Tuning
                                       C41- 0.1 mf
                                                           R7 -0.5 meg.
                                                                             R23- 2 megohm
      Gang
                   C25- 80 mmf
                                       C42- 25 mf
                                                           R8 -2 meg.
                                                                             R24- 25 ohm
  - 0.01 mf
                   C26- 2.5 to 30mmf
                                       043-0.001 mf
                                                           R9 -500 ohm
                                                                             R25- 50,000 ohm
Clo- 0.01 mf
                   C27- 8 mf
                                       C44- 0.07 mf
                                                           R10-50,000"
                                                                             R26- 2 megohm
C11- 80 mmf
                   028- 0.01 mf
                                                           R11-25 ohm
                                       C45- 0.02 mf
                                                                             R27- 0.25 megohm
C12- 0.01 mf
                   C29- 80 mmf
                                       C46- 0.01 mf
                                                           R12-5 meg.
                                                                             R28- 0.5 megohm
C13- 2.5 to 30mmf C30- 2.5 to 30mmf
                                                           R13-0.15 mag.
                                       C47- 16 mf
                                                                             R29- 10,000 ohm
R30- 50,000 ohm
Cl4- 0.0045 mf
                                       C48- 16 mf
C49- 16 mf
                   C31- 0.05 mf
                                                           R14-10 meg.
C15- 2.5 to 30mmf
                   C32- 0.05 mf
                                                           R15-25,000 ohm
                                                                             R31- 250 ohm
C16- 0.05 mf
                   033-0.01 mf
                                       C50- 0.002 mf
                                                           R16-200 ohm
                                                                             R32-1,000 ohm
C17- 0.01 mf
                   034- 2.5 to 30mmf C51- 25 mmf
                                                           R17-60,000
R18-0.5 mag.
                                                                             R33- 50 ohm
C18- 100 mmf
                   C35- 80 mmf
                                       R1 - 0.1 meg.
```

Voltage Rating (Power Supply) 220-250 volts A.C. (Also special 110 volt Models)
Tuning Range - 1600 to 540 Kg/s. 8 to 22 Mg/s. Intermediate Proquency - 472.5 Kg/s.
VALVE EQUIPMENT: R.F. Amp. 607G R.F. Penthode. Freq. Convt. EK2G Octode. I F. Amp.
607G R.F. Penthode. Det. and Audio 686G Duo-diode Trioùe. Pow er Amp. 606G Beam Tetrode
Tuning Indicator 605. Dial Lamp 6.5 volt 0.64A.

PHILIPS 2870

Battery or Battery Vibrator Operated

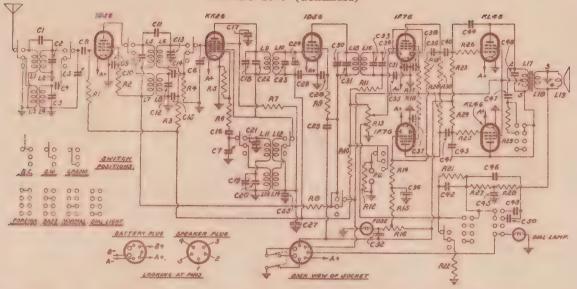
Tuning Ranges: 1610 to 540 Kc/s. 8 to 22 Mc/s. Intermediate Freq.: 472.5 Kc/s.

Battery Boalment: For Battery Operation: 1-2 volt accumulator (100 amp. hrs. capac.)
3-45 volt triple capacity "8" batteries. For Battery Vibrator Operation (with type 330, 220 or 148 Vibrator Unit); 1-6 volt accumulator (100 amp. hrs. capacity).

BATTERY CONSUMPTION: "8" Battery Operation: "A" Battery: 0.65 amp. approx. "8" Battery: 15 mA approx. Battery Vibrator Operation (with type 330, 220 or 148 Vib.: "A" Battery: 1.2 amp. at 6 volts.

VANUE EQUIPMENT: R.P. Amp. 1D5G R.F. Penthode. Freq.Convt. KK2G Octode. I.F. Amp. 1D5G-R.F. Penthode. Demod. & 1st Audio 1F7G D.D. Penthode. Phase Inverter 1F7G D.D. Fenthode.

PHILIPS 2870 (Continued)



Cl -2mmf C2 -2.5 to 30mmf C3 - "	C21-2.5 to 30mmf C22-80 mmf C23-80 mmf	C401 mf C411 mf C4203mf	R8 -1,000 ohm R9 -50,000 ohm R10-2 megohm	R26 - 50,000 ohm R27 - 10,000 ohm R28 - 1000 ohm
C40045 mf	C24-2.5 to 30mm?		R11-60,000 ohm	R29 - 25,000 ohm
C5,C6,G7 -Gang Condenser	C25Ol mf	C44-25mmf C4503mf	R121 megohm R135 meg.pot.	R30 - 0.25 megohm
C8 -100 mmf	C27-40 mf	C4600lmf	R14-70,000 ohm	L1 - 30 ohms L2 - 3.5 ohms
C901 mf	C2801 mf	C4701 mf	R15-50,000 ohm	L3 - 3.5 ohma
C10-30 mmf	C2905 mf	C48002mf	R16-400 ohm	L5 - 60 ohms
Cll-4mmf	030-2.5 to 30mmf		tap.at 100 ohm	L6 - 3.5 ohms
C12-2.5 to 30mmf	C31-80 mmf .	C50006mf C5125mf	R17-1 megohm	L9 - 8 ohms
C140045 mf	C33-80 mmf	R1 -lmeg.	R19-2 megohm	L10 - 8 ohms L15 - 8 ohms
C1505 mf	C34-2.5 to 30mmf	R2 -0.25 meg.	R20-0.25 meg.	L16 - 8 ohms
	C35-100 mmf	R3 -100,000 ohm		Lll - 1 ohm
C1701 mf	C36-25 mf	R4 -1 megohm	R22-5000 ohm	L12 - 2.5 ohms
C18-2.5 to 30mmf	0371 mf	R5 -50,000 ohm R6 -25 ohm	R23-1 megohm	L17 - 400 ohms
C20-340 mmf	C391 mf	R7 -50,000 ohm	R25-50,000 ohm	L19 - 1.8 ohms

SCREEN BIAS OSC.P.FIL. NOTE: These voltage values with the exception PLATE VOLT .VOLT .VOLT . VALVE VOLTAGE VOLTAGE of bias voltages are measured between the soc-30 0 1D5G R.F. 120 ket points indicated and chaseis with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to 120 50 0 KKZG 2 1D5G I.F. 128 60 0 1F7G Det. 30 15 0 be measured at the source of the voltage. 2 1F7G Driv. 30 15 1.6 incorrect readings will otherwise be obtained. 126 128 KL4G They are measured with a 1,000 0/P/V.

VIBRATOR OPERATION: This model is intended for operation either with "B" batteries or alternatively with Philips 330,220 or 148 Vibrator unit. If it is desired to use the unit in place of "B" batteries, reference should be made to the instructions accompanying the unit. The switch on the 330 or 220 unit must be adjusted to position "G" and on the 148 unit to position "6713" to adapt the unit to a 2870 Receiver. It is also necessary to change the dial panel lamp to a 6.3 volt 0.1 amp. type. FUSE LAMP. A fuse lamp is fitted in series with the "B" battery negative lead as a measure of protection against valve filament burn-outs. The set will not operate if the lamp is fused or not properly screwed into the socket. The correct replacement fuse lamp is of the 2.5V 0.1 amp.type.

PHILIPS 3343

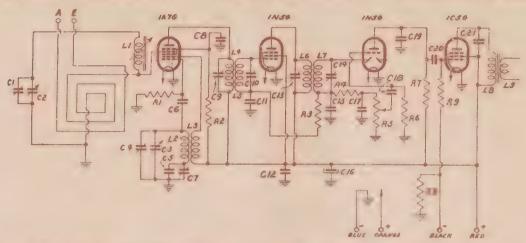
Portable Receiver for Broadcast Reception

Tuning Range: 1500 to 550 Kc/s. Intermediate Freq.: 472.5 Kc/s.

VAIVE EQUIPMENT: Freq.Gonvt. 1A7G Pentagrid. I.F. Amp. 1N5G Penthode. Demod.& Audio - 1H5G D.D. Triode. Power Amp. 1C5G Penthode.

PHILIPS 3343 (Continued) BATTERY EQUIPMENT: 1—Type PR 1.5 Battery.

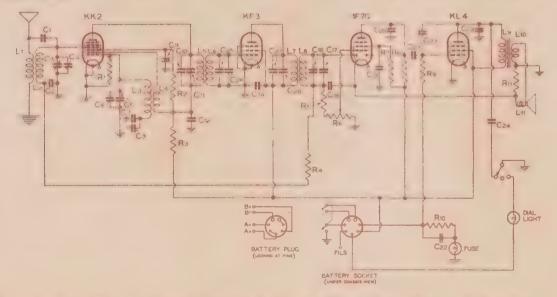
2-Type PR 5 Batteries.



```
Cl - 2.5 to 30mmf C9,Cl0- Part of 1st C17- 250 mmf
                                                         R3 - 3 megohm
02.03-Tuning Gang
                           I.F.
                                        618- 0.01 mf
                                                         R4 - 0.05 megohm
C4 - 2.5 to 30mmf Cll- 0.1 mf
                                        C19- 100 mm.r
                                                         R5 - 0.5 megohm pot.
C5 - 330 mmf
                  G12-0.1 mf
                                        020-0.01 mf
                                                         R6 - 3 magahm
                  C13&14-Part 2nd IF 021- 0.006 mf
C6 - 80 mmf
                                                         R7 - 1 magchm
C7 - 2.5 to 30mmf C15- 250 mmf
C8 - 0.01 mf C16- 24 mf
                                                         68 - 1,000 ohm
                                        B1 - 0.2 meg.
                                        R2 - 0.05 W
                                                         R9 - 2 megohm
```

PHILIPS 1949—MODIFICATIONS

The following changes apply to all 1949 Radioplayers with serial numbers greater than 2000.



R1 - 50,000 ohm. Additional resistor in series with KK2 oscillator grid: R12-50 ohm. C4 - 0-25 mmf. C7 - 280 mmf

PHILIPS 1949—MODIFICATIONS (Continued)

VIBRATOR OPERATION: Model 1949 Serial Numbers less than 1500 may be operated in conjunction with Philips 220 or 330 vibrator units, adjusted to switch position "B".

Model 1949 Serial Numbers greater than 1500 may be operated in conjunction with Philips 220 or 330 vibrator units, adjusted to switch pos-

ition "A".

These instructions should be followed precisely as otherwise damage to

valves may ensue.

On no account should model 148 vibrator unit be used with 1949 Serial Numbers greater than 1500.

VALVES: The following valve types are incorporated in model 1949 with Serial Numbers greater than 2000.

Frequency Converter - KK2G I.F. Amplifier - KF3G Detector & Audio - 1F7G Power Amplifier - KL4G

ADDITIONAL COMPONENTS: C25- 0-30 mmf Cond. C26- 80 mmf Cond. C27- 80 mmf cond. C28- 0-30 mmf Cond. C29- 10 mmf cond. R11- 0.6 ohm Resistor (part of speaker unit).

PHILIPS 2262

(Continued from Page 268)

VOLTAGE ANALYSIS.

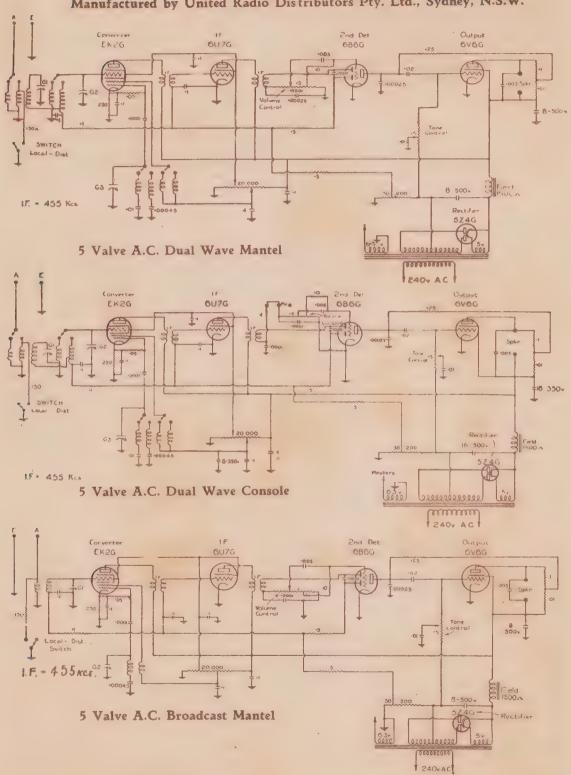
	PLATE	SCREEN	BIAS	
VALVE V	OLTAGE	VOLT AGE	VOLTAGE	
6U7G	225	70	1.4	
EK2G	225	40	1.0	
6U7G	235	80	1.4	
6B6G	90	-	0	
6V 6G	225	235	10	
5Y3G			. per plate)
Voltages	are mea	sured wi	th a 1,000	
O/P/V and	may va	ry as mu	ich as 10%	
from the	figures	quoted.		

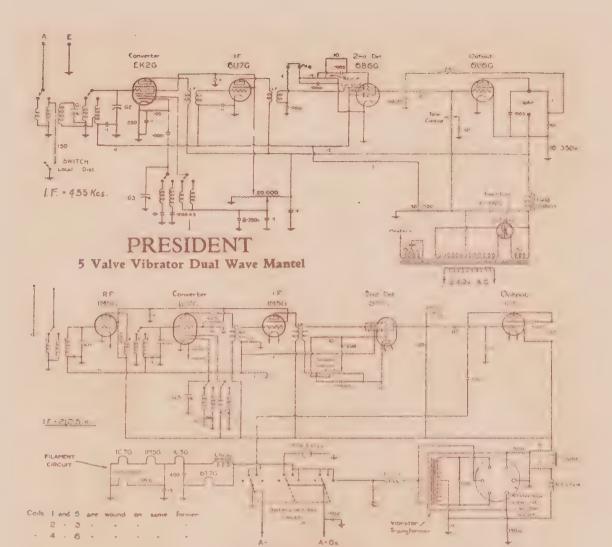
NOTE: These voltage values, with the exception of bias voltages, are measured between the socket points indicated and chassis, with the receiver in the no signal condition and with the volume control at zero. Bias voltages are to be measured at the source of the voltage, as incorrect readings will otherwise be obtained.

MEMORANDA

PRESIDENT RADIO

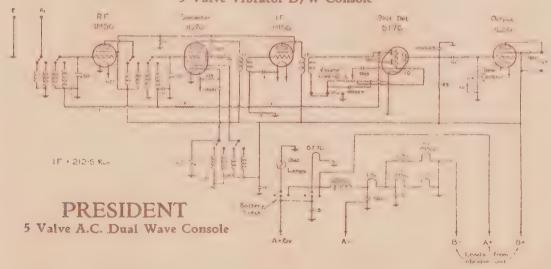
Manufactured by United Radio Distributors Pty. Ltd., Sydney, N.S.W.

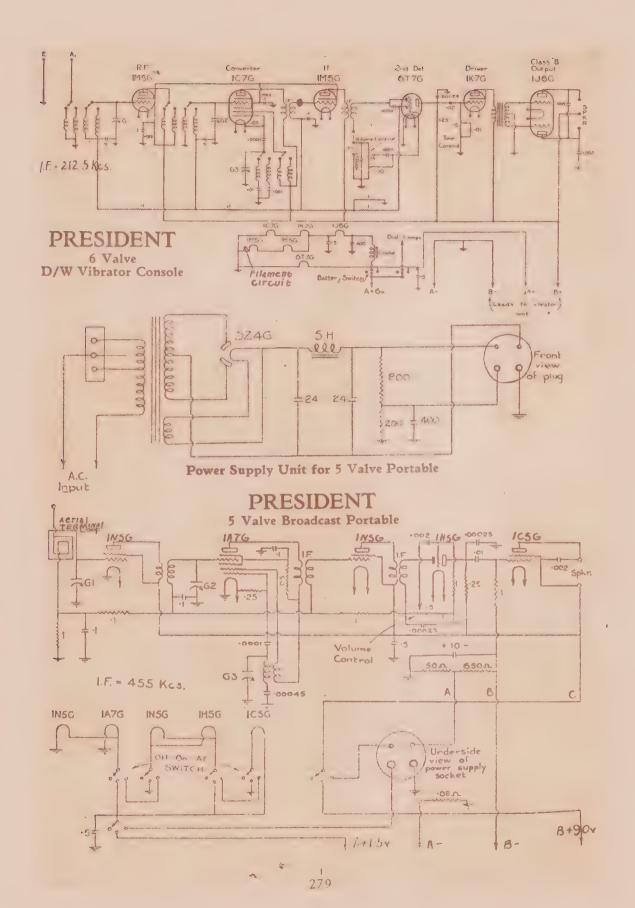




PRESIDENT

5 Valve Vibrator D/W Console



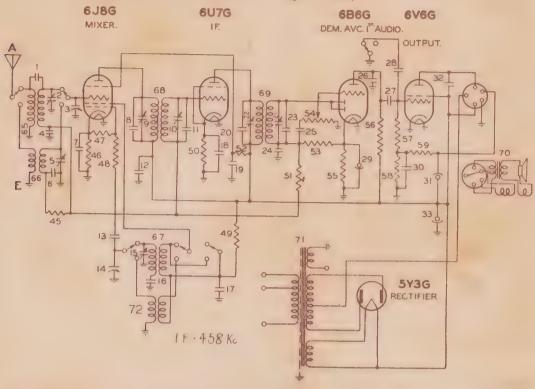


STROMBERG-CARLSON RADIO

Manufactured by Stromberg-Carlson (Aust.) Pty. Ltd., Sydney, N.S.W.

ROMBERG-CARLSON

5 Valve A.C. Dual Wave Superheterodyne



VOLTAGES: These were measured with a line voltage of 240 and a voltreter having a resistence 1,000 ohms per volt. All readings in respect to chassis.

VALVE		PLATE SCH	REEN CATHODE	#The grid bias for the 6V6G cannot be dir-
6 J8 G	Mixer	195	50 2	ectly measured on an ordinary voltmeter.
	Osc. Section	110 -	-	It is derived from the voltage drop (65V)
6170	I.F.	195	50 1.6	across the speaker field situated in the
6B6G	Dem. A.V.C. 1st Audio		- 1.0	negative HT lead.
6V6G	Output	200	95 01	
To redu	ce the voltage to a sui	table value	e for bles two	o resistors of 1 megohm and 0.15 megohm are

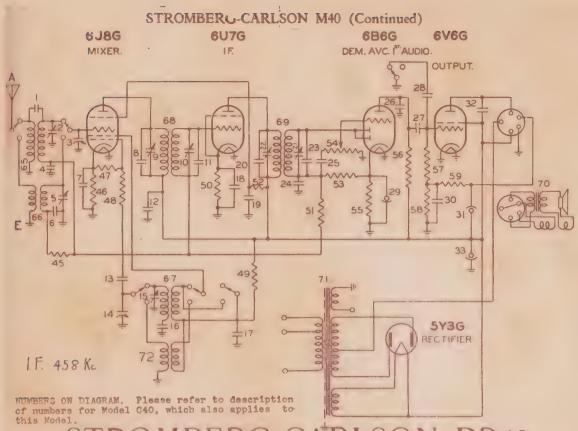
connected in ser	les across the flet	a and their common	borne grass to actes	plas for the evec.
	11. 65mmf ±10%	21. Trimmer 2P	31. 16mf elec.525	52. 50,000w 1#
2. Trimmer 2P	12lmf 400V		P.V.	53. 250,000 w 1/3%
3. Gang type HS.	130001mf mica	23. 65mmf ±10%	33. 8mf elec. 525	54. 1 mer. w Volume
2 C.	14. Gang type HS2-	2400025 mf	P.V.	Control
405mf 200V	C.	25Olmf 400V	45. 100,000w 1/3W	55. 4,000 w 1/3W
5. Trimmer 2P	15. Air trim.15P	260005 mf	46. 300 w 1/5W	56. 250,000 w 1W
6004mf mica	16. 440 mmf	27Olmf 400V	47. 50,000w 1/3W	57. 500,000 w 1/3W
71mf 200V	17Olmf 400V	28004 mf 400V	48. 100w 1/3W	58. 150,000 w 1/3W
8. 65 mmf ± 10%	18lmf 200V	29, 10mf 25V	49. 20,000w 1W	59. 1 meg. w 1/3W
9. Trimmer 2P	1905mf 400V	3015mf 200V	50. 400w 1/3W	
10. " ""	20. 65mmf ± 10%	32005 mf 600V	51. 1 meg.w 1/3W	

STROMBERG CAPLSON M.40
5 Valve A.C. Dual Wave Superheterodyne

VOLTAGES: These were messured with a line voltage of 240 and a voltmeter having a resistence of 1,000 ohus per volt. All readings in respect to chassis.

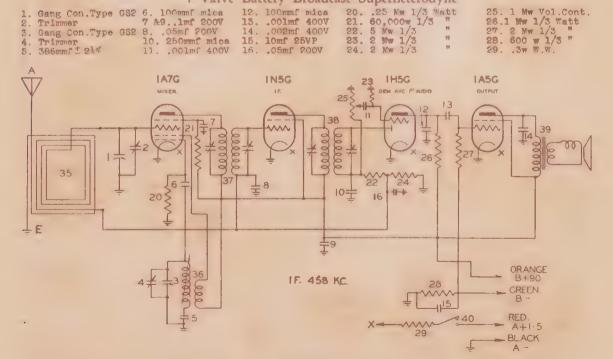
VALVE		PLATE	SCREEN	CATHODE	#The grid bias for the 6V6G cannot be dir-
6J8G	Mixer	195	50	2	ectly measured on an ordinary voltmeter.
	Csc. Section	110	-	-	It is derived from the voltage drop (65V)
607G	I.F.	195	50	1.6	scross the speaker field situated in the
6B60	Dem. A.V.C. 1st Audio	85	to to	1.0	negative FT lead.
SVEG	Ontint	185	195	O.A.	

To reduce the voltage to a suitable value for bias two resistors of 1 meg. at 1 0.15 megchm are connected in series across the field and their common point gives 10 volts bias for the 6V60.



STROMBERG-CARLSON PD40

4 Valve Battery Broadcast Superheterodyne



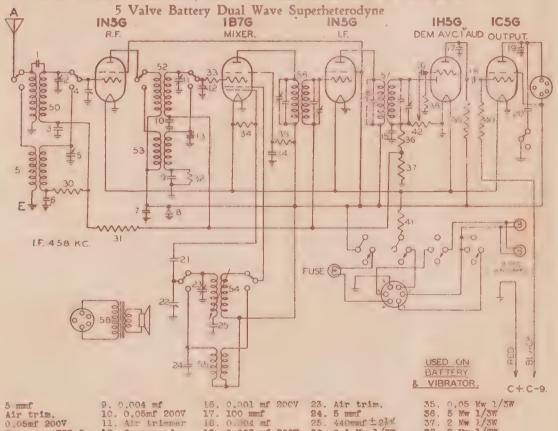
STROMBERG-CARLSON PD40

4 Valve Battery Broadcast Superheterodyne

All voltages were measured with a volt-meter having a resistance of 1000 ohms per volt between the points indicated and chassis.

				BACK
VALVE		PLATE	SCREEN	BIAS
1A7G	Mixer	83	35	60
	Triode Section	83	-	-
IN5G	I.F.	83	83	eth
1H5G	Dem. AVC.			
	audio	30	-	-
1A5G	Output .	83	85	-4.5

ROMBERG-CARLSO



1. 5 mmf	9. 0.0	04 mf	16.
2. Air trim.		.05mf 200V	17.
3. 0.05mf 200V		r trimmer	18.
4. Gang con.HS5-C		ing cond.	19.
5. Air trimmer		3-C	20.
	0.10	r trimmer	21.
6. 0.004 mf			
7. 0.1mf 200V		1mf 200V	22.
8. 8mf 350P.V.	15. 28	io mini	
VALVE	PLAS	TE OCREEN	BIAS
INSGT R.P.	90	90	40
1B7GT Mixer	90	35	_
Triode Secti			-
INSOT I.F.	90	90	-
1H5GT Dem. AVC Aud			
1056 Output	80	90	-9
All voltages were n			
meter having a resi			
per volt between th	ne boru.	t indicate	a and
chaseis			

35, 0,05 Mw 1/3W 36, 5 Mw 1/3W 37, 2 Mw 1/3W 38, 2 Mw 1/3W 39, 1 Mw 1/3W 40, 2 Mw 1/3W 41, 0,3w Wire Tound 42, 1 mag, Vol.Cont. 25. 440mm 1 22% 50. 0.1 Mw 1/3W 51. 0.1 Mw 1/3W 52. 0.1 Mw 1/3W 53. 50w 1/5W 54. 0.15 Mw 1/3W Gang con. HS3-RATTERY (PURATION: The following batteries are recommended:"A" Battery: 1.5 volt type Y250 Tweready or equiv.
"B" Battery: Two 45-volt type SD45"
"C" Battery: 9 volt Type T93 Evereacy or equiv.
"Tal Lamp Rattery: 4.5 volt type 126 or equivalent, or alternatively three 12-volt cells wired in series.

0.05

7 /30

VIBRATOR OPERATION: This Faceiver is readily seletable to Vibrator operation, in which case "A" "B" and Dial Lawp batteries may be dispensed with for all time. The "C" bias battery, however, is still required. The S-C Vibrator Unit V.140 has been specially designed to permit this conversion, and operates entirely from a 6-volt storage battery. Conversion to vibrator operation involves merely the unplugging of the battery cable from the chassis and the substitution of a similar cable from the Vibrator Unit.

0.001 mf 200V

0.002 mf 200V 0.02mf 200V

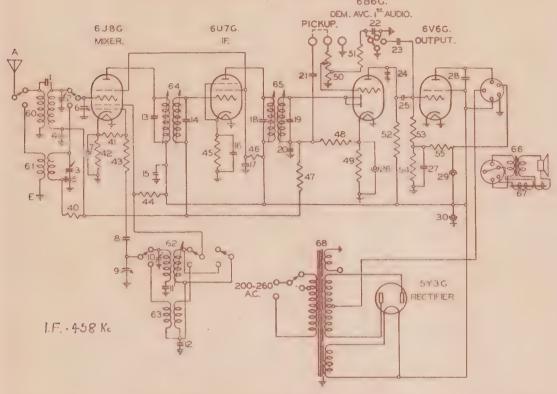
0,004 mf

The normal battery switch on the receiver is already wired to control the V.140 unit, and so no extra switches are required.

282

STROMBERG-CARLSON 541

5 Valve A.C. Dual Wave Superheterodyne



```
50. 1 meg.Vol.Cont.
51. 50,000w 1/3W
52. 0.25 meg. 1W
53. 0.5 meg.1/3W
54. 0.15 meg.1/3W
55. 1 meg.1/3W
                                                                             440mmf = 23%
                                                                                                                     21. 0.01mf 400V
22. 0.007 mf 400V
23. 0.004 mf 400V
                                                                                                                                                                                40. 0.1 meg.1/3W
41. 50,000w 1/3W
42. 300w 1/3W
2. Air trim.15P
                                                                            0.005 mf
70mmf ± 21%
70mmf ± 21%
                                                                 13.
        0.05mf 200V
                                                                 14.
                                                                                                                      24. 500 mmf
                                                                                                                                                                                 43.
                                                                                                                                                                                            100w 1/3W
4. 0.00mr 200v

5. 0.003 mf

6. 2 gang type "H" C

7. 0.1mf 200v

8. 100 mmf

9. 2 gang type "H" C

10.Air trim. 15P
                                                               15. 0.1mf 400V

16. 0.1mf 200V

17. 0.05mf 400V

18. 100mmf ± 24%

19. 100mmf ± 24%

20. 250 mmf
                                                                                                                                                                                43. 100w 1/5W

44. 20,000w 1W

45. 400w 1/3W

46. 50,000w 1W

47. 1 meg.1/5W

48. 0.25 meg.1/5W

49. 4,000w 1/3W
                                                                                                                     25. 0.01mf 400V
                                                                                                                     26. 10mf 25V
27. 0.15mf 200V
28. 0.003mf 600V
29. 16mf 525VP 30. 8mf 525VP 3
                                                                                                                                                                                                                                                   # Tap.at 0.5 meg.
```

LINE VOLTAGE SWITCH: This is located on the back of the chassis near the power cord entry. Always operate the receiver on the tapping nearest to but not greater than the line voltage in the district. When leaving the factory the switch is set to the 230-260 volt tap.

	Ü		-		· ·	
VALVE		PLATE	SCREEN	CATHODE	VOLTAGES: These were measured with a line	
6 J8G	Mixer	250	70	3	voltage of 240 and a voltmeter having a	
	Osc. Section	170	-	-	resistance of 1000 ohms per volt. All read-	
6070	I.F.	250	70	5	ings were measured between the points in-	
6B6G	Dom. AVC 1st audio	120	-	1.25	dicated and chassis.	
6V60	Output	235	250	0 +		

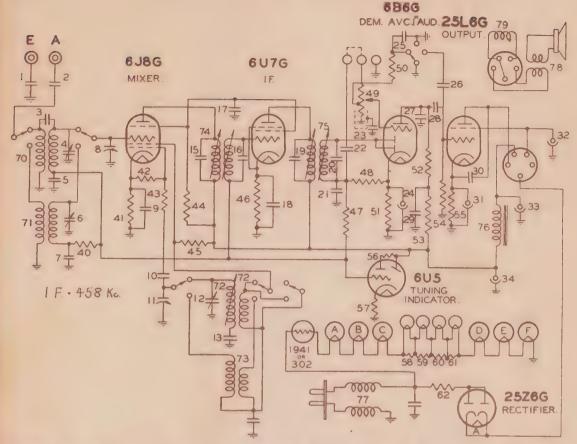
I The grid bias for the 6V6G cannot be directly measured on an ordinary voltmeter. It is derived from the voltage drop (95 volts) across the speaker field situated in the negative HT lead. To reduce this voltage to a suitable value for bias two resistors of 1 megohm and 0.15 megohm are connected in series across the field and their common point gives 13 volts bias for the 6V6G.

STROMBERG-CARLSON 601

4 Valve A.C./D.C. Dual Wave Superheterodyne

	7 Valve 11.0./1	.c. Duai wave or	permeterouyme	
1. 0.02mf 600V	13. 440mmf ± 21%	25. 0.01mf 400V	41. 300w 1/3N	53. 20,000w lW
2. 0.003mf 600V		7 26. 0.004mf 400V	42. 50,000w 1/3W	54. 500,000w 1/3W
3. 5 mmf	15. 70mm; 1 210	27. 500mmnf	43. 100w 1/3W	55. 150w % W
4. Air trim, 15P	16. 70mm(± 2]x	28. 0.01mf 400V	44. 50,000w IW	56. 1 meg.1/3W
5. 0.05mf 200V	17. 0.05mf 400V	29: 0.5mf 400V	45. 20,000w 1W	57. 2,000w 1/3W
6. Air trim.15P	18. 0.1mf 200V	30. 0,02mf 600V	46. 400w 1/3W	58. 40W) 4 section
7. 0.003mf 600V	19. 100mmf ± 23%	31. 10mf 25VP	47. 1 meg. 1/37	59. 407 10
8. 2 gang type H.C.	20. 100mmf 123	32, 4mf 525VP)	48. 250,000 w 1/33	60. 40% Wire wound
9. 0.lmf 200V	21. 250mmf	33. 16mf 525VP}*	49. 1 meg. 701. Con.	bi. 40W) Resistor
10.100 mmf	22. 0.01mf 400V	34. 24mf 525VP)	50. 50,000w 1/37	62. 100w 3W
11. 2 gang type H.C	23. 0.005mf 600	7 35. 0.02mf 600V	51. 4,000w 1/37	
12. Air trim.15P	24. 10mf 25VP	40. 100,000w 1/3W	52. 250,000w lW	# Tap. at 0.5 meg.

STROMBERG-CARLSON 601 (Continued)



VOLTAGES: This receiver will operate on alternating or direct current power supplies between and 250 volts. No adjustment to the chassis is necessary. When used on D.C. the plug must be nected in the correct polarity. If reversed, the receiver will not operate. 180

```
VOLTAGES: These were measured with a line voltage of 240 and a voltmeter having a resistance of 1000 ohms per volt. All readings were meas-
                                        PLATE
VALVE
                                                   SCREEN CATHODE
6J8G
          Mixer
                                          215
                                                      75
                                                                  3
          Osc. Section
                                          110
607G
           I.F.
                                          215
                                                      75
                                                                             ured in respect to chassis.
                                                               1.25
6B6G
          Dem. AVC lst audio
                                           85
                                          110
                                                    120
25T-6G
          Output
```

700

```
5 Valve Battery Dual Wave Superheterodyne
                                                                                                                                                                                                                                                                                                              21. 100 mmf ± 23% 31. 8mf 350PV
22. 100 mmf ± 23% 40. 0.25meg.1/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49. 0.15 meg.1/37 50. 2 meg. 1/37 51. 1 meg.1/37
                                                                                                                                              11. 0.004
 1. 3 mmf
                                                                                                                                                                                                                                                                                                             22. 100 mm
23. 250mmf
                                                                                                                                              12. 3 gang type H.C
13. 100 mmf
 2. Air trim.15P
                                                                                                                                                                                                                                                                                                           25. 0.00lmf 200V 42. 0.25meg, 1/3W 52. 2 meg. 1/3W 26. 100 mmf 44. 0.15 meg.1/3W 55. 0.07 meg.1/3W 27. 0.00lmf 200V 45. 0.07meg.1/3W 55. 0.3w - W/wound 28. 0.02mf 200V 46. 1 meg.Vol.C.*
29. 0.02mf 200V 47. 5 meg.1/3W 55. 0.3w - W/wound 30. Air trim.15P 48. 2 meg.1/3W Tap. at 0.5 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 55. 0.5w - W/wound 50. Air trim.15P 48. 2 meg.1/3W 57. Air trim.15P 48. 2 m
 3. 0.05mf 200V
                                                                                                                                            14. 3 gang type H.C.
15. Air trim.15P
  4. 0.004
5. 3 gang type HC
6. 0.lmf 200V
7. 3 mmf
                                                                                                                                            16. 440mmf ± 2½%

17. 0.01 mf

18. 100 mmf ± 2½%

19. 100 mmf ± 2½%
8. Air trim.15P
9. 0.05mf 200V
  10.Air trim.15P
                                                                                                                                              20. 0.1mf 200V
```

Conversion to vibrator operation involves merely the unplugging of the battery cable from the chassis and the substitution of a similar cable from the Vibrator Unit. The normal battery switch on the receiver is already wired to control the V.140 Unit, and so no extra switches are required.

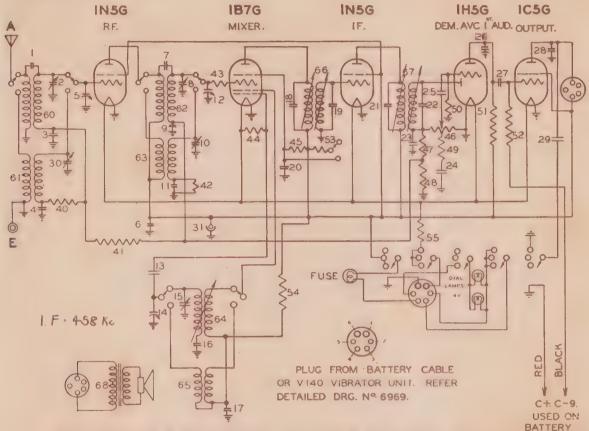
BATTERY OPERATION: The following Batteries are recommended: -

```
"A" Battery - 1.5 volt. Type X250 Eveready or equivalent.
"B" Battery - 1.5 volt. Type S.D. 45 Eveready or equivalent.
"B" Battery - Two 45 volt. Type Type S.D. 45 Eveready or equivalent.
"C" Battery - 9 volt. Type Type Eveready or equivalent
Dial Lamp Battery. 4.5 volt. Type 126 Eveready or
equivalent Type.
```

STROMBERG-CARLSON 700 (Continued)

VALVE		PLATE	SCREEN	BIAS
1N5GT	R.F.	90	90	101
1B7GT	Mixer	90	35	-
42.44	Triode Section	90	an an	-
INSGT	I.F.	90	90	-
1H5GT	Dem. A.V.C. Audio	30	en	-
1050	Ontont	90	90	-9

All voltages were measured with a voltmeter having a resistance of 1000 ohms per volt between the point indicated and chassis.



AND VIBRATOR.

4 Valve Superheterodyne A.C. Dual Wave

			I		
		10003mf 600V	18lmf 400V	25. amf elect.	37. 0.5 meg. 1/3W
2.	Air Trim .15P	11005mf 600V	19. 70mmf	525PV	38. 375 ohm W/W
3.	2 Gang type HS-C	12004mf 600V	20. 2 gang type	50. 50,000 ohm 1/3W	70 mA
	70 mmf	13. Air trimmer	HS-C	31. 50 ohm 1W	39. 100,000 ohm 1/3W
5.	70 mmf	15P -	21. Trimmer 2P	32. 50,000 ohm 1W	40. 200 ohm 1/3W
6.	Trimmer 2P	14004mf mioa	22. 440 mmf	33. 100.000 ohm1#	41. 2500 ohm W/W
7.	65 mmf	155mf 200V	2305mf 400V	34. 0.5 meg.1/3W	Volume Con-
8.	65 mmf	16lmf.400V	24. 16mf elect.	35. 10 meg.1/3W	trol
9.	Trimmer 2P	1700lmf 400V	525PV	36. 0.25 meg.lW	42. 20,000 ohm 1W

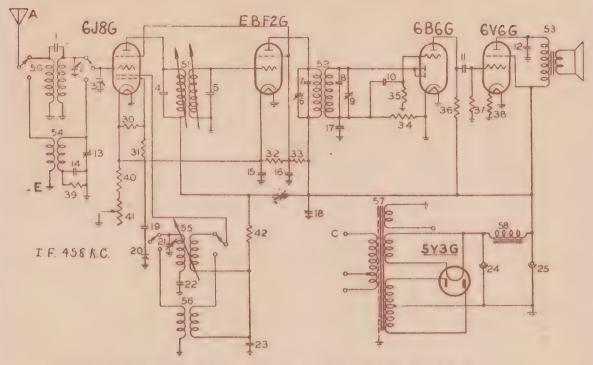
The screen and cathode voltages of the I.F. and mixer valves vary with setting of volume trol.
Bias for the 6066 is obtained from a resistor in the negative H.T. lead and should be 12 volts ap-

proximately.

VALVE		PLATE	SCREEN	CATHODE	
EK20	Mixer Osc. section	210 210	40-70	2-15	
EBF2G 6V 6G	I.F. Dom. Output	210 210	40-70 210	2-15	

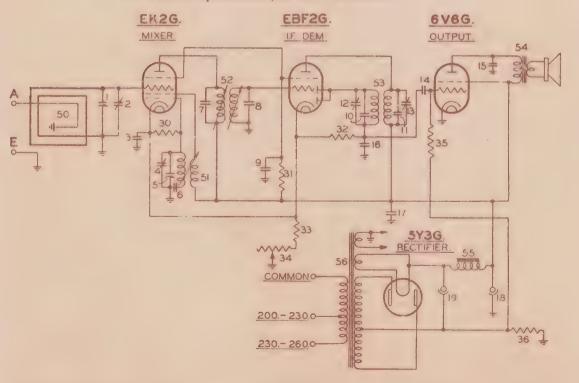
VOLTAGES: These were measured with a line voltage of 240 and a voltmeter having a resistance of 1000 O/P/V. All readings are measured in respect to chassis.

STROMBERG-CARLSON D31 (Continued)



STROMBERG-CARLSON M31

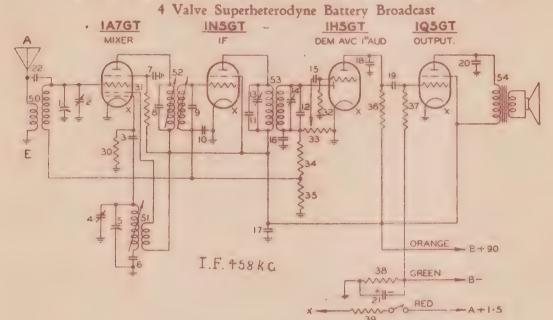
4 Valve Superheterodyne A.C. Broadcast



STROMBERG-CARLSON M31 (Continued)

H9-C	5. 2 Gang type H8.2-C	11. 65 mmf 17. 0.lmf 400V 33. 200 ohm 1/3W	
2. Air trimmer	6. 440 mmf	12. Trimmer 18. Amf 525PV 34. 2500 ohm	
	H 510 6		
15P '	7. 70 mm£	13 Trimmer 19. 16mf 525FV 35. 500.000 ohm 1/3W	
T A F-A COOK	8. 70 mmf		
		14. 0.0 lmf 600V 30. 50,000 ohm 1/3W 36. 375 ohm W/W	
4. Air trim.15P	9. 0.lmf 400V	15. 0.004mf 600V 31. 100,000 ohm 1W 70 Ma.	
VALVE	PLATE SCREEN	CATHODE VOLTAGES: These were measured with a line vol-	
EK2G Mixer	210 40-70	2-15 tage of 240 and a voltmeter having a resistance	
Oso. Section		of 1,000 ohms per volt. All readings were mea-	
EBF2G IF. Dem.	210 40-70	2-15 sured between the points indicated, and chassis	
	010 010		
5V6G Output	210 210	0	

The screen and cathode voltages of the I.P. and mixer valves vary with setting of volume control. Bias for the 6V6G is obtained from a resistor in the negative H.T. lead and should be 12 volts approximately.



2. A1: 5. 0.0 4. A1: 5. 2	Gang type HS-C T trim. 15P DOOIMf mica c trim. 15P Gang type "HS" - C	6. 440 mmf 7. 0.lmf 20 8. 70 mmf 9. 70 mmf 10. 0.05mf 11. 65 mmf 12. 65 mmf	200V 1	3. Trimmer mica 4. 5. 0.00lmf mica 6. 0.00lmf mica 7. 0.lmf 200V 8. 0.000lmf nica 9. 0.002mf 600V	20. 0.002mf 600V 21. 10mf 40FV electro. 22. 5mmf 30. 200,000 okm 1/3W 31. 70,000 okm 1/3W 32. 2 meg. 1/3W	35. 2 meg. 1/3W 36. 1 meg. 1/3W 37. 2 meg. 1/3W 38. 600 ohm 1/3W
VALVE		PLATE 85		ACK BLAS	,	
2 NI COM	Triode Se		w 0.6	60 60	All voltages were mean meter having a resist	
TNOGI.	I.F.	85	85	40	MO TOT HEATING W LODITOR	37700 01 2000 01220

85 -5.5 Output chassis

5 Valve Superheterodyne A.C. Dual Wave

			2 4 442	TO COPT		
VALVE		PLATE	SCREEN	CATHODE		
6J8G	Mixer	195	50	2		
	Osc.Section	110	-	-		
6U7G	I.F.	195	50	1.6		
6B60	Dem. A.V.C.		-	1.0		
6V 60	Output		195	0 1 (800	next	page)

30

I.F.

Dam. AVC. Audio

1H5GT

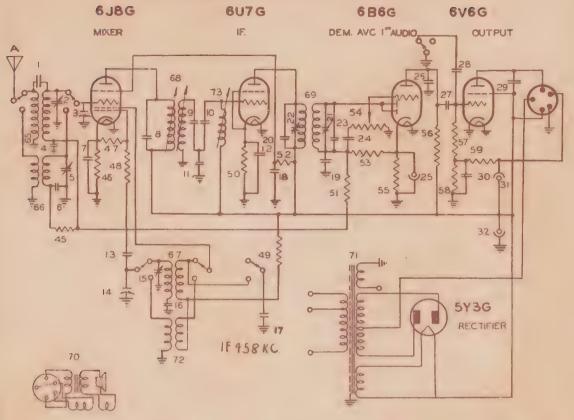
1Q5GT

VOLTAGES: These were measured with a line voltage of 240 and a voltmeter having a resistance of 1000 chms per volt. All readings were measured between the points indicated &

per volt between the points indicated &

BLACK

STROMBERG-CARLSON C41 (Continued)



1. 5 mmf	11005		Trim. 2P 3	1. 16	mf elec. 8	51. :	1 meg. 1/3W
2. Trimmer	2P 12lmf			5	25 P.V. 8	52.	50,000 w 1/3W
3. Gang ty	e HS2-C 13. 100mm	f mica 23.	65mmf ± 10% 3	2. 8m	f elect. 5	53. 1	250,000w 1/3W
405mf 20	OV 14. Gang	type HS2-C 24.	.Olmf 400V	5	25 P.V. 5	54. :	1 meg. Volume Conf
5. Trimmer	2P 15. Air t	rim. 15P 25.	lomf 25V 4	5. 10	0.000w 1/3W 8	55.	4000 w 1/3W
6004mf	10a 16. 440 n	mf 26.	500 mmf 4	6. 30	Ow 1/3W 8	56. 2	250,000w lW
7lmf 200	V 17Olmi	? 400V 27.	.0lmf 400V 4'	7. 50	,000w 1/3W 8	57.	500,000w 1/3W
8. 70 mmf	1805mi	28.	.004mf 400V 4	8. 10			150 000w 1/3 W
9. 70 mmf	19. 250 m	mf 29.	.003mf 600V 49	9. 20			1 meg. 1/3W
10. 70 mmf	20. 65mm	± 10% 30.	.15mf 200V 5	0. 40	Ow 1/3W		

The grid bias for the 6V6G cannot be directly measured on an ordinary voltmeter. It is derived from the voltage drop (65 volts) across the speaker field situated in the negative HT lead.

To reduce this voltage to a suitable value for bias, two resistors of 1 megahm and 0.15 megahm are connected in series across the field, and their common point gives 10 volts bias for the 6V6G.

TONE MONITOR: Turn to the right to increase the high frequency response of the receiver.

WAVE CHANGE SWITCH: This has two positions: Anticlockwise for reception of short wave stations between 13 and 35 metres, and clockwise for the regular b/cast band 1600 to 550 K.C.

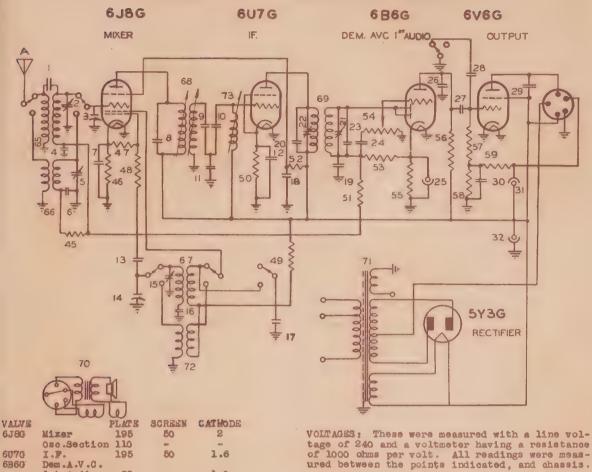
STROMBERG-CARLSON M41

5 Valve Superheterodyne A.C. Dual Wave 20. 65mmf + 10% 30. .15mf 200V 11. .005mf 20JV 50. 400 W 1/3W 12. .lmf 200V 13. 100 mmf mica 51. 1 meg. 1/3% 52. 50,000w 1/3W 21. Trim. 2P 31. 16mf elect. 2. Trimmer 2P 3. Gang type HS2-C 4. .05mf 200V 22. Trim. 2P 23. 65mmf ± 10% 525 P.V. 14. Gang type HS2-0 53. 250,000w 1/3W amf elect. 24. .0lmf 4cov 25. lomf 25v 54. 1 megohm Volume Con. 525 P.V. 5. Trimmer 2P 45. 100,000w 1/3W 6. .004mf mica 15. Air trim. 15P 55. 4000w 1/3W 7. .lmf 200V 8. 70 mmf 56. 250,000w lW 57. 500,000w 1/3W 58. 150,000 w 1/3W 16. 440 mmf 26. 500 mmf 46. 300 w 1/3W 17. .01mf 400V 18. .05mf 400V 19. 250 mmf 47. 50,000w 1/3W 48. 100w 1/3W 27. .olmf 400V 9. 70 mm£ 28. .004mf 400V 29. .003mf 600V 49. 20,000w 1/3W 10. 70 mmf 59. 1 megohm 1/3 W

TONE MONITOR: Turn to the right to increase the high frequency response of the receiver.

NAVE RANGE SWITCH: This has two positions: Anticlockwise for reception of short wave stations
between 13 and 35 metres, and clockwise for the regular broadcast band 1600 to 550 K.C.

STROMBERG-CARLSON M41 (Continued)



*The grid bias for the 6V6G cannot be directly measured on an ordinary voltmeter. It is derive from the voltage drop (65 volts) across the speaker field situated in the negative HT lead. Treduce this voltage to a suitable value for bias, two resistors of 1 megohm and 0.15 megohm even connected in series across the field, and their common point gives 10 volts bias for the 6V6G.

STROMBERG-CARLSON PD51

6 Valve Superheterodyne A.C./Battery Dual Wave

The PD51 model, when used in conjunction with its companion power unit, AC51, features the unique property of being either an A.C. or portable battery receiver at will by the mere throwing over of a switch. As either of these, it is a dual wave set. For the b/cast band, a built-in loop antenna precludes the necessity for an external aerial in locations with reasonably good signal strength. For better b/cast reception, or for the short waves, an external aerial and earth are easily connected by means of two terminals just inside the back of the cabinet. Low consumption 1.4 valves ensure economical battery life and good performance. The PD51 can be operated without the AC51 Unit as a standard battery portable set only.

TYPE PR45 TYPE PR45 SEE NOTE BELLOW

B BATTERIES.

A BATTERY.

BATTERY CONNECTIONS .

lst Audio

185

195

0 %

Output

6V6G

M

BATTERY OPERATION: Batteries are located below the shelf on which the chassis is mounted. The types recommended are:"A" Battery - 1.5 volt. Type PRS Eveready or equivalent.
"B" Battery - Two 45 volts. Type PR45 Eveready or equivalent.
NOTE: Using the recommended battery types, it will be found that the most convenient arrangement below the shelf is that in which the "A" battery is placed between the other two, with its terminals towards one of them.

ON-OFF SWITCH: This has three positions, the central being that of the receiver switched off. Glockwise rotation to the right-hand position switches the receiver on to the self-contained battery supply, while counter-clockwise rotation to

STROMBERG-CARLSON PD51 (Continued)

the left-hand position permits operation from the A.C. mains.

WAVE-CHANGE SWITCH: Counter clockwise rotation brings reception of short-wave stations between 13 and 35 metres, while clockwise rotation serves for the 1600 to 550 K.C. broadcast band. Indicator flags show the positions of ON-OFF and Wave-Change Switches through holes in the dial plate above the knobs.

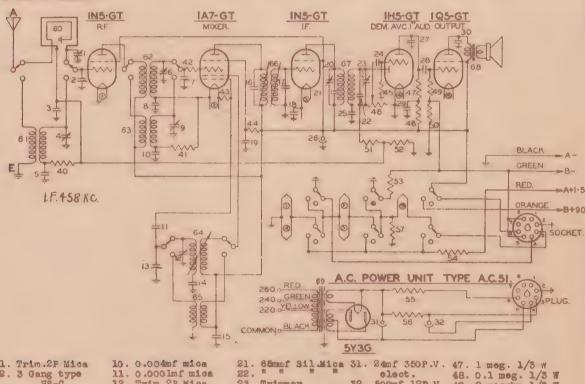
A.C. OPERATION: The ACS1 is a power unit specially designed for the PD51 Set. In the event of the set having been purchased without it, space will be found reserved behind the loudspeaker. Installation of the unit commences with the removal of the four screws at the bottom of the cabinet, permitting the complete shelf and chassis to be slid out through the back. The AC51 unit is then secured in the space provided on the shelf by two screws from its underside. Electrical connection between the two units is effected by means of a cable terminating in an 8-inch plug. This is inserted in the recentagle shown in the photograph.

inserted in the receptacle shown in the photograph.

Line Voltage adjustments to the AC51 unit should be carried out before installation. On the under side of the chassis will be found a terminal strip carrying lugs marked 220,240,260. The red wire of the power cord will be found to be connected to the 240 lug, while the black wire will be on a fourth (common) lug. This last wire should never be disturbed. The red wire, however, should be moved to the lug corresponding to the voltage nearest to, but not less than that of the district

supply.

IMPORTANT: Reference to the circuit diagram of the AC51 unit will show the absence of any switching arrangements in the 240-volt power cord. It is essential therefore when operating from the A.C. mains, to employ the normal wall switch for switching the receiver on and off, otherwise the AC51 unit will at all times be energised, irrespective of the position of the ON-OFF switch on the receiver chassis.



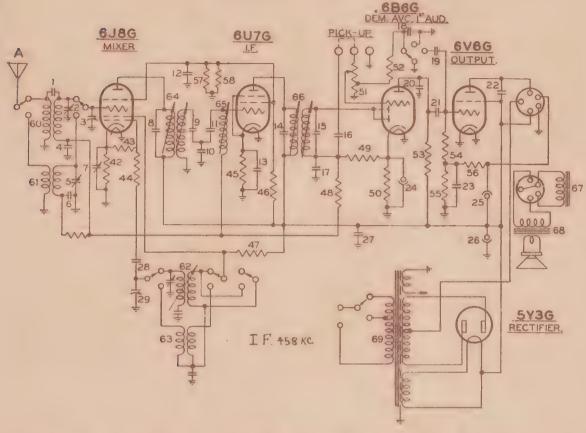
						Mari		
	Trim .2P Mica 3 Gang type	11. 0.000lmf mica	22. "	Smmf Sil Mica		elect.		1 meg. 1/3 W
	HS-C	12. Trim .2P Mica	23. Tr	rimmer	32.	500mf 12P V.	49.	2 megohm 1/3 W
	0.lmf 200V	13. 3 gang type HS-C	24. 0.	.002mf mica		elect.		500 w 1/3 W
4.	Trim . 2P Mica	14. 440mmf 25% mica	25. 0.	.00025mf mica	40.	0.lmeg.1/3W	51.	5 meg. 1/3 W
5.	0.004mf mica	15. 0.lmf 200V	26. 24			11 11 11 11		2 meg. 1/3 W
6.	Trim .2P M1ca	16. 70mmf Sil-Mica		elect.	42.	50w 1/3W		15 w Wire Wound
7.	3 Gang type	17. 70mmf Sil.Mica	27. 0.					0.3 w Wire Wound
,	713 -C	18. 0.lmf 200V	28. 0.	.002mf 600V	44.	0.2meg.1/3W		1500 w 1 W
8.	0.lmf 200V	19. 0.lmf 200V	29. 0.			2 meg.1/3 W		1200w Wire Wound
9.	Trim .2P Mica	20. Trimmer	30 . 0			1 meg.V.Con.		200 w 1/3 W

VALVE		PLATE	SCREEN	BACK BIAS
1N5OT	R.F. Amp.	90	90	-
1A7GT	Mixel Section	90	35	-
	Triode Section	90	es .	40
	I.F. Amp.	80	90	-
	Dem. A.V.C., Audio	30	60	-
1Q5GT	Output.	80	80	48

VOLTAGES: These should be measured with the receiver operating on batteries only using a 1000 ohm per volt meter, between the points indicated and chassis.

STROMBERG-CARLSON 542

5 Valve Superheterodyne A.C. Dual Wave



£.	5 mmf	11. 70 mmf	22. 0.003mf 60	00V 30. Air trim.15P	48. 1 meg. 1/3 W
2.	Air trim.15P	12. 0.05mf 400V	23. 0.15mf 200	OV 31. 440 mmf	49. 0.25 meg. 1/3W
3.	2 gang type	13. 0.lmf 200V	24. lomf 40P.	7. 32. 0.005mf mica	50. 4000 w 1/3 W
	HS-C	14. 100 mmf	elect.		51. 1 meg. Vol.Cont
4.	0.05mf 200V	15. 100 mmf	25. 16mf 525P		52. 50.000 w 1/3 W
5.	Air trim .15P	16. 0.0lmf 600V	elect.		53. 0.25 meg. 1W
	C.OO3mf mica	17. 250 mmf	26. 8mf 525P.V		54. 0.5 meg. 1/3 W
	.0 . imf 200V	18. 0.007mf mica	elect.		55. 0.15 meg. 1/3
	70 mmf	19. 0.002mf 600V	27. 0.lmf 400		
	70 mmf	20. 500mmf mica			56. 1 meg. 1/3 W
			28. 0.000lmf n		57. 100,000 w 1 W
10	.0.005mf 600V	21. 0.0lmf 600V	29. 2 Gang ty	DOHS-C 47. 20,000w 1W	58. 100.000 w 1 W
			9 0.	2.1 20,000 211	00. 200,000 0 4 4

VALVE		PLATE	SCREEN	CATHODE	
6J8G	Mixer	250	70	3	1
	Osc .Section	170	en .	-	
6U7G	I.F.	250	70	3	
6B6G	Dem. A.V.C.				
	lat Audio	120	_	1.25	
6V60	Output	235	250	0*	

VOLTAGES: These were measured with a line voltage of 240 and a voltmeter having a resistance of 1000 ohms per volt. All readings were measured between the points indicated, and chassis.

* The grid bias for the 6V6G cannot be directly measured on an ordinary voltmeter. It is derived

A The grid bias for the 6V6G cannot be directly measured on an ordinary voltmeter. It is derived from the voltage drop (95 volts) across the speaker field situated in the negative HT lead.

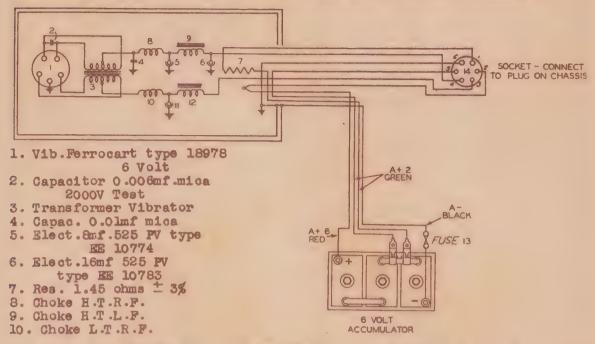
To reduce this voltage to a suitable value for bias, two resistors of 1 megohm and 0.15 megohm are connected in series across the field, and their common point gives 13 volts bias for the 6V6G. GRAMOPHONE PICK-UP TERMINALS: Are located at the back of the chassis. To use a pick-up, first remove the metal strap between the middle and left-hand terminals, and connect the pick-up to the middle and right-hand terminals. Should hum be present, reverse the two leads from the pick-up. The metal strap must be replaced in its original position when radio reception is again required. The volume and tone controls both operate when the pick-up is in use.

WAVE RANGE SWITCH: This has two positions: Anticlockwise for reception of short wave stations between 13 and 35 metres, and clockwise for the regular broadcast band 1600 to 550 K.C.

TONE MONITOR: Turn to the right to increase the high frequency response of the receiver.

STROMBERG-CARLSON V140

For Operating 1.4-volt Battery Receivers from a 6-volt Accumulator



- 11. Elect. 500 MF 12 P.V. type EE 10778.
- 13. Fuse 2 amp.

- 12. Choke L.T.L.F.
- 14. Amphenol cable connector PF.6.

The V.140 Vibrator Unit has been designed for use with all the 5 Valve battery Receivers released since January 1940, which employ the new low consumption 1.4 volt valves, and permits operation of these receivers from a single 6-volt accumulator instead of the usual combination "A" and "B" batteries. Conversion from battery to vibrator operation is merely the substitution of a plug on a cable from the unit for the normal cable used with batteries.

The conversion eliminates the need for "A", "B" and Dial lamp batteries, although the normal "C" bias battery remains in use. Provision has been made in all the 1940 5 valve Battery Receiver Series for the normal ON/OFF switch to also operate the vibrator, and this precludes the need for any additional switches within the cabinet or on the battery. Economy of battery current consumption can still be effected by switching off the Dial Lamps when the tuning process has been completed.

IMPORTANT: When using this vibrator unit the receiver must be switched off before accumulator is either connected or disconnected.

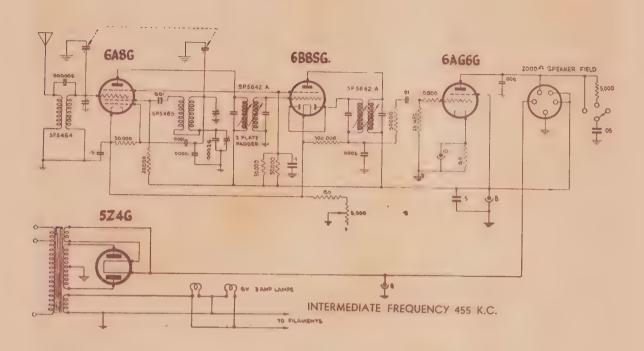
OPERATION: The V.140 unit has been designed to deliver 350 mA. at volts for filament supply and 11 mA. at 90 volts for "B" supply. The points at which these voltages should be checked are indicated in the circuit diagram. Such measurements should be made with a receiver load connected, and using a voltmeter having a resistance of 1000 ohms per volt.

S.T.C. RADIO

Manufactured by Standard Telephones & Cables, Sydney, N.S.W.

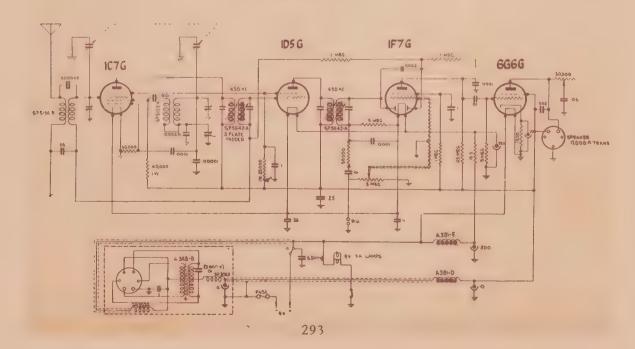
S.T.C. 411V

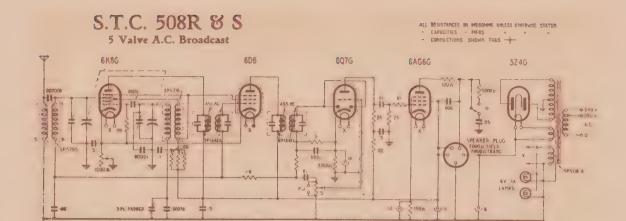
4 Valve A.C. Broadcast



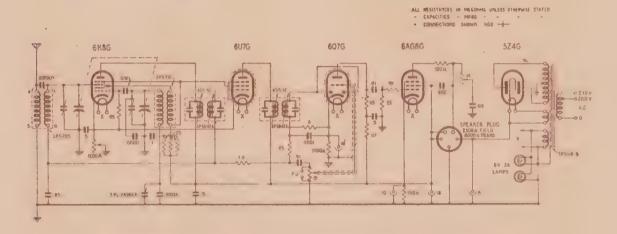
S.T.C. 415G

4 Valve Broadcast Vibrator

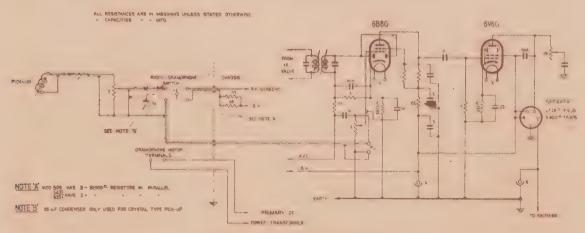




S.T.C. 509T
5 Valve A.C. Broadcast

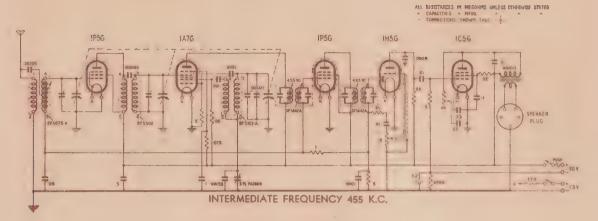


MODIFICATIONS TO MODELS 509, 543 & 635 FOR RADIOGRAM OPERATION



INTERMEDIATE FREQUENCY 455 K.C.

S.T.C. 510



S.T.C. 542R & S 5 Valve A.C. Dual Wave

INTERMEDIATE FREQUENCY 455 K.C.

6D6

6076

6A660

5746

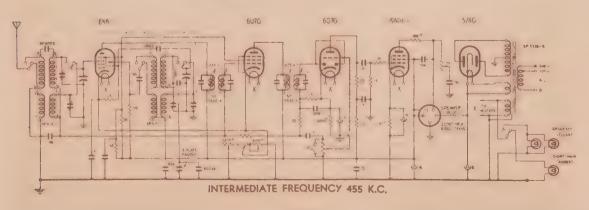
SERANE

SERAN

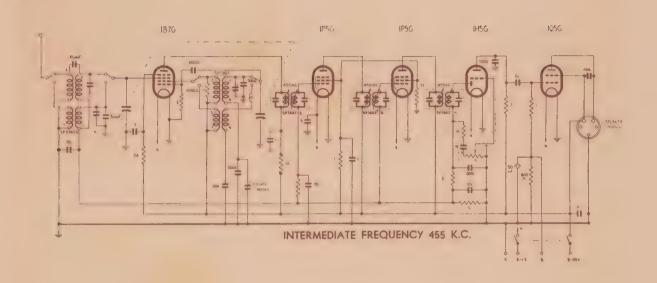
S.T.C. 543T J & U

5 Valve A.C. Dual Wave

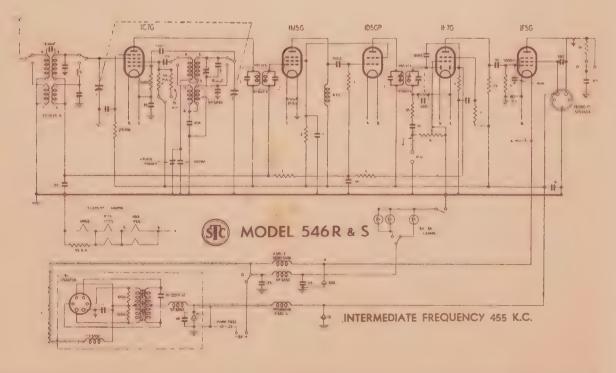
ALL RESOLANCES ARE IN HEGINALS VINLESS STATED STHERMES CONNECTIONS SHOWN THUS --



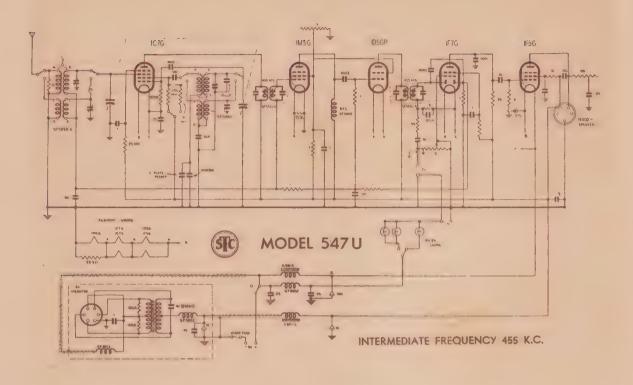
S.T.C. 544V
MANTEL & PORTABLE



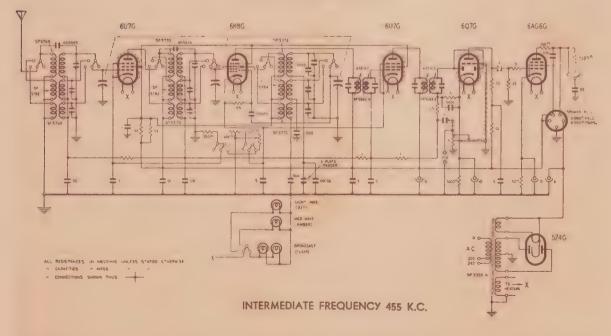
S.T.C. 546R & S



S.T.C. 547U

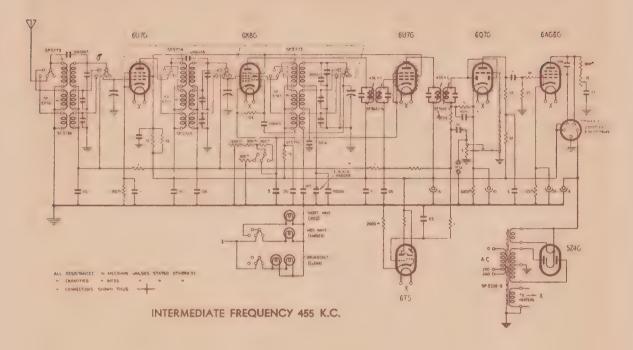


S.T.C. 634R & S

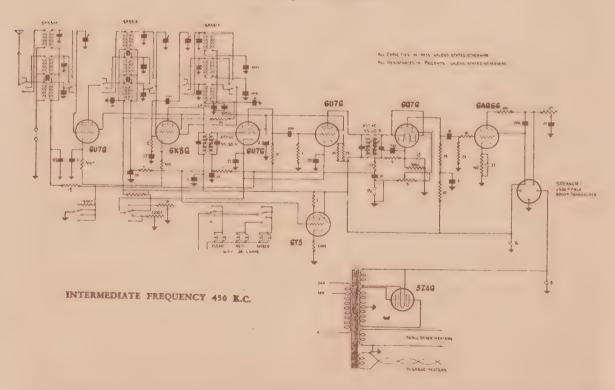


S.T.C. 635J & U

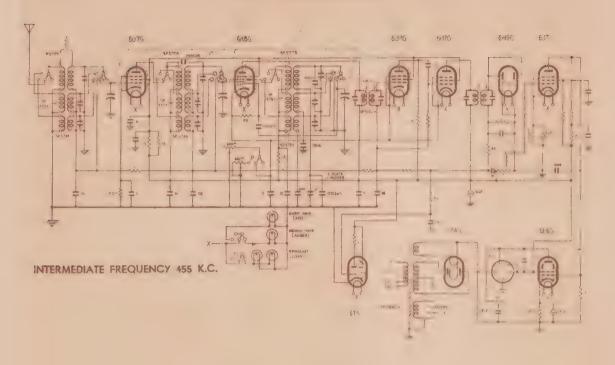
6 Valve Triple Wave Receiver



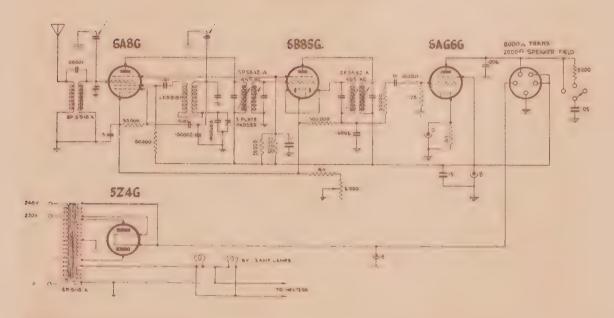
S.T.C. 732
7 Valve Triple Wave Receiver



S.T.C. 831W 8 Valve Triple Wave Receiver



S.T.C. 413X & H 4 Valve Broadcast Receiver

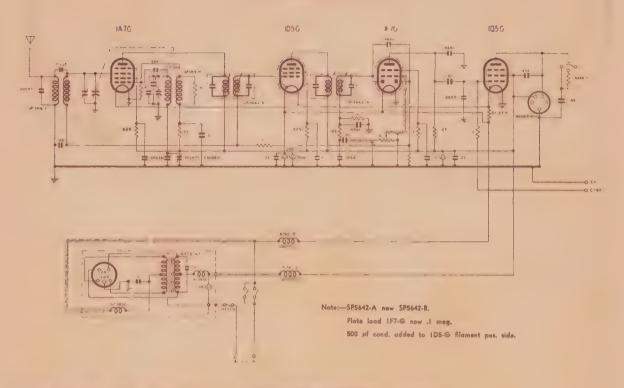


TUNING RANGE: 550-1600 K.C.

ELECTRIC SUPPLY: 200-240 volts A.C. 50 cycles.

S.T.C. 416X & H

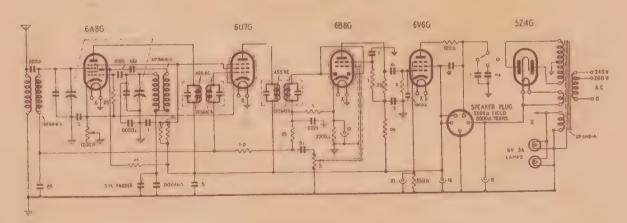
4 Valve Broadcast Vibrator



TUNING RANGE: 550-1600 K.C. INTERMEDIATE FREQUENCY: 455 K.C. BATTERY EQUIPMENT: 1 - 2 volt 19 plate "A" battery.

S.T.C. 512X & H

5 Valve Broadcast Receiver



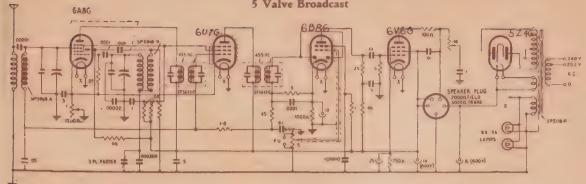
INTERMEDIATE FREQUENCY: 455 K.C.

TUNING RANGE: 550-1600 K.C.

ELECTRIC SUPPLY: 200-240 volts A.C. 50 cycles.

S.T.C. 513E

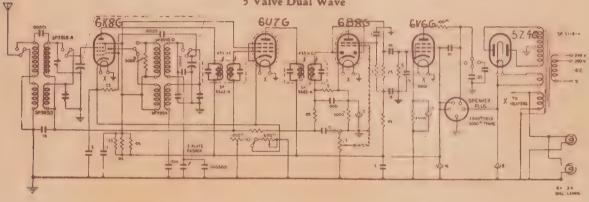
5 Valve Broadcast



TUNING RANGE: 550-1600 K.C. ELEC. SUPPLY: 200-240 V. A.C.50 cycles. I.F. 455 K.C.

S.T.C. 548X

5 Valve Dual Wave

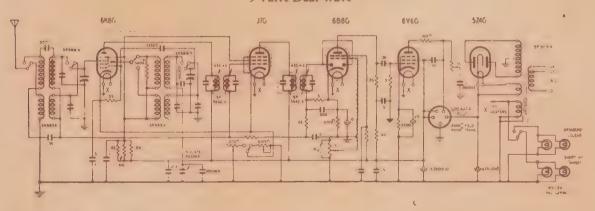


TUNING RANGE: 550-1600 K.C. ELEC.SUPPLY: 200-240 volt & 13.5 to 43 metres A.C. 50 cycles.

INTERMEDIATE FREQ: 455 K.C.

S.T.C. 549E & F

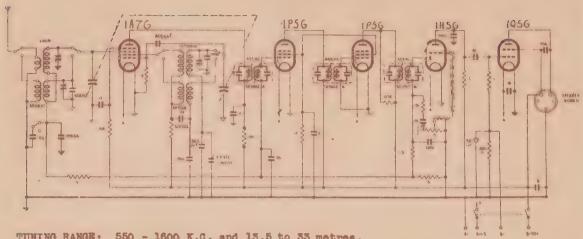
5 Valve Dual Wave



TUNING RANGE: 550-1600 K.C. and 13.5 to 43 metres.

ELECTRIC SUPPLY: 200-240 volts A.C. 50 cycles. INTER. FREQUENCY: 455 K.C.

S.T.C. 550P 5 Valve Battery D/W Portable

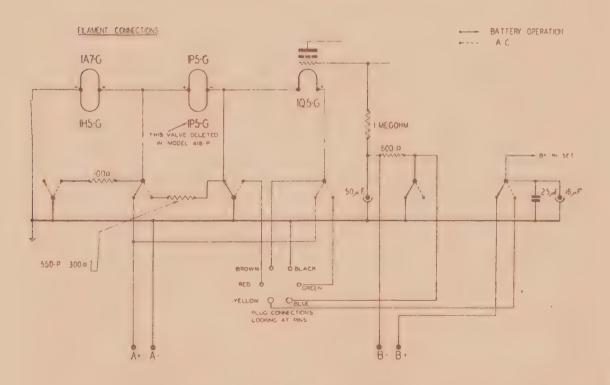


TUNING RANGE: 550 - 1600 K.C. and 13.5 to 33 metres.

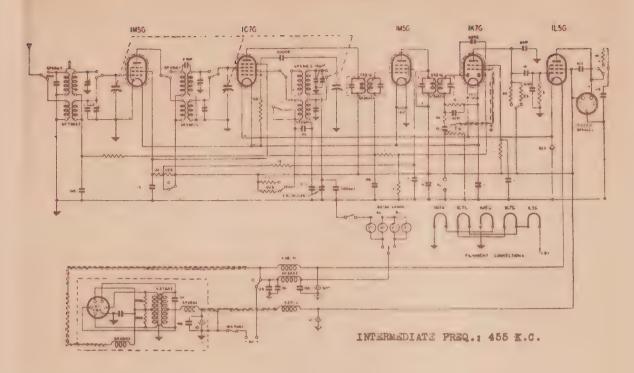
BATTERY EQUIPMENT: 2 - PR45 forty-five volt "B" and 1 - PR 8 1.5 volt "A" special portable type batteries.

INTERMEDIATE PREQUENCY - 455 K.C.

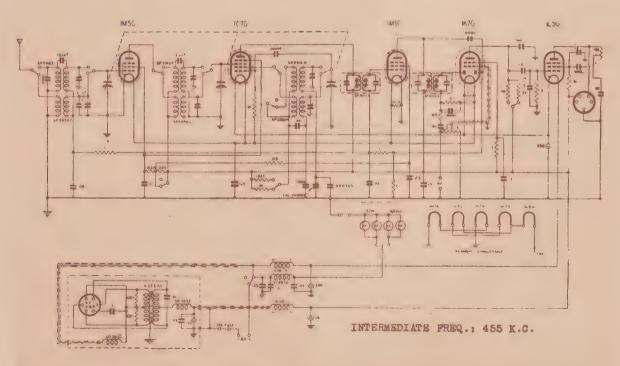
S.T.C. 550P-MODIFICATIONS FOR A.C. OR BATTERY OPERATION



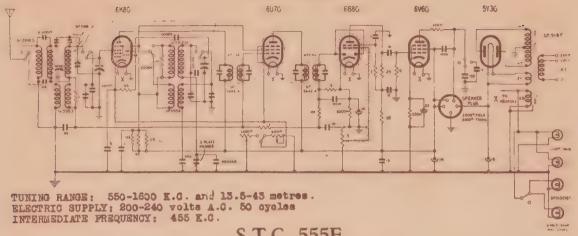
S.T.C. 552G



S.T.C. 553F

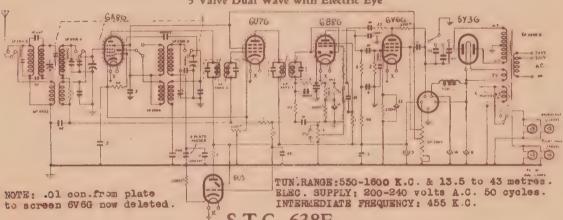


S.T.C. 554G, R or S 5 Valve Dual Wave

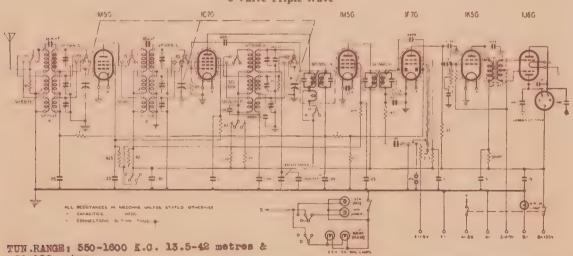


S.T.C. 555F

5 Valve Dual Wave with Electric Eye

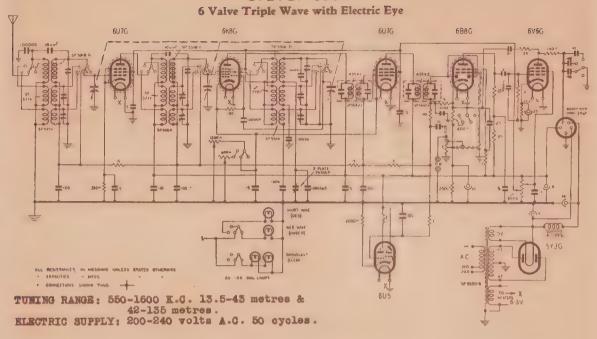


S.T.C. 638F 6 Valve Triple Wave

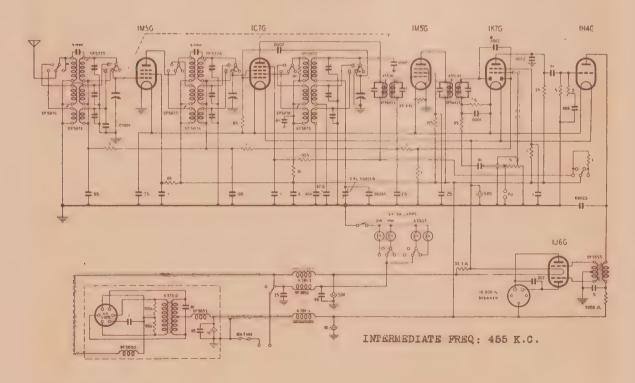


39-129 metres. BATTERY EQUIPMENT: A 2 volt 15 plate accumulator "A" battery. 3 - SD45V. forty-five volt dry "B" batteries. One 42 volt dry "C" battery.

S.T.C. 639F



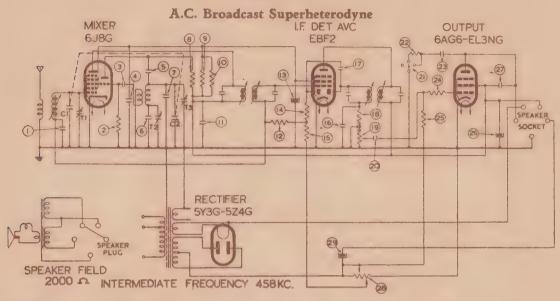
S.T.C. 636F



TASMA RADIO

Manufactured by Thom & Smith Pty. Ltd., 919 Botany Road, Mascot, N.S.W.

TASMA 701



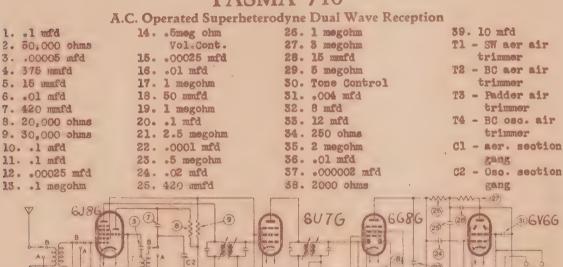
11 mfd 2. 50,000 ohms	111 mfd 125 megohm	2002 mfd 21. Tone Co		- Aerial Sec	otion
3. 50 mmfd	15. 8 mfd	22. 5000 oh		- Oscillator	r Section
41 mfd	14. 1 meg ohm	2305 mfd		Gang	
5. 420 mmfd	155 megohm	24. 10,000	ohms Tl	- Aerial Air	r
6. 875 mmfd	1600025 mfd	255 mego		trimmer	
7. 15 mmfd .	1700005 mfd	26. 12 mfd		- Padd. air	
8. 20,000 ohms	18. 50,000 ohm	27004 mf		trimme	
9. 40,000 ohms	195meg ohm	28. 250 ohm	s TS	- Oscillator	r air
10.40,000 ohms	Vol. C.	29. 8 mfd		trimmer	
VALVE FUNCTION	OF VALVE EF	BP IP	ESG EG	EAG	IAG
6J8G Mixer	6.5	245 2	110 2.5	150	3.5
EBF2 I.F. Det	. AVC 6.3	245 5.2	110 2.5	-	-
ELSH Output	6.5	250 25	245 6.5	en .	
5Z4G Rectifie	r 5.0	-		-	40
	7	ASMA	706		
		TIGHANT	, 00		

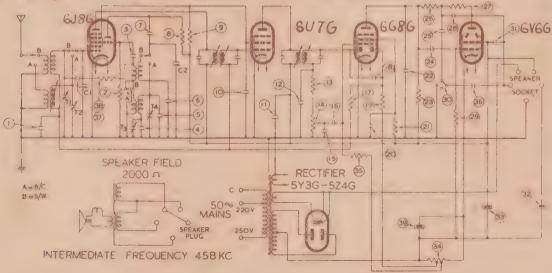
A.C. Operated Superheterodyne Broadcast Reception

VALVE	FUNCTION C)f va	LVE	EF	EP .	ĮP	ESG	EG	EAG	IAG
6J8G	Mixer			6.3	225	1.2	90	5.0	140	4.5
8U7G	I.F. Amp.		,	6.3	225	6.5	90	3.0	-	
6G8G	Det. AVC A	udio		6.3	60	0.5 .	25	1.0	60	-
6V6G	Output			6.3	210	-33	225	14.0	-	-
5Y3G	Rectifier			5.0		-	-	400	-	**
11 mfd		10.	1 megohm		19.	. 1 me	gohm		28.	420 mmfd
21 mfd		11.	.00025 mfd		20.	250	ohms		29.	.Ol mfd
3. 50,000	ohms	12.	.5 meg V.C	ļ	21.	000	25 mfd		30.	3 meg.
4. 50 mmfd		13.	.1 megohm		22.	.1 2	ıfd i		31.	15 mmfd
5. 420 mmf	đ	14.	Tone Contr	ol	23	2.5	meg oh	m	52:	.004 infd
6. 390 mmf	đ	15.	.01 mfd		24	. "5 в	egohm		33 -	12 mfd
7. 20,000	ohms	16.	.0001 mfd		25	02	mfd		34.	8 mfd
8. 30,000	ohme	17.	50 mmfd		26	. "Б п	egohm		35.	25 mfd
91 mfd		18.	2 megohm		27	. 1 me	gohm			

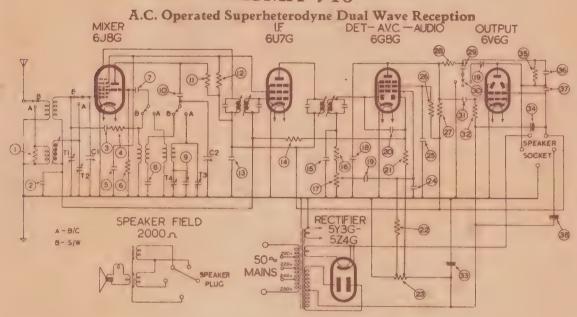
TASMA 706 MIXER DET. AV.C. AUDIO OUTPUT 6U7G 6J8G 6G8G 6V6G W9-00) SPEAKER (11)-SOCKET 33) (34) (18) SPEAKER FIELD RECTIFIER 2000n (19) --- 5Y3G-5Z4G 50% SPEAKER MAINS INTERMEDIATE FREQUENCY 458KC

TASMA 710





VALVE	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
6J8G	Mxor	6.3	215	1.0	90	5.0	125	4.0
6U7G	I.F. Amp.	6.3	215	5.0	90	5.0	em .	-
6G8G	Det. AVC audio	6.3	20	0.5	15	1.0	_	-
6V6G	Output	6.3	200	30	215	13.0	-	-
5 Z4 G	Regtifier	5.0	-	-		-	-	-



INTERMEDIATE FREQUENCY 458 KC

1. 10,000 0	hms	14. 1 megohm		275	megohm	C2	- 080	section	
21 mfd		15. 250 mmfd		28. 1	megohm		gang	S	
5. 2 mmfd		16l megohm		29. 42	o mmfd	T1	- SW 4	er air	
4. 1000 ohm	in .	175megohm V.C	•	30. To	ne Contr	ol	trin	mer	
5. 1 mfd		180001 mfd		310	2 mfd	T2	- B/C	aer air	
	lone	19Ol mfd		328			tri		
6. 50,000 0	L TITUTA	20. 50 mmfd			mfd	T3	-	oscillat	or
7. 50 mmfd		21. 1 megohm			mfd	10		trimmer	
801 mfd					megohm	TA		padder a	1 10
9. 390 mmfd		22. 2 megohm			0	12		mer	2.2
10. 420 mmf		23. 250 ohms			mmfd		OFIL	miet.	
11. 20,000		2400025 mfd)04 mfd				
12. 30,000	ohms	251 mfd		38. 8	mfd				
131 mfd		26. 2.5 megohm		C1 - s	rer 800.	gang			
VALVE	FINCTION	OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
6J8G	Mixer		6.3	225	1.2	. 90	3.0	140	4.5
6070	I.F. Amp		6.3	225	6.5	90	3.0	- 1	-
	Det. AVC		6.3	60	0.5	25	1.0		-
6G8G		Autio	6.3	210	33	225	14.0		-
6V6G	Output		5.0	~~0	-		-		
5 Y3 G	Rectifies		8.0						

A.C. Operated Superheterodyne Dual Wave Reception

1. 10,000 ohms	41 mfd	705 mfd	10. 5000 ohms
205 mfd	5. 12 mfd	8. 1000 ohms	11. 50 mmfd
31 megohm	61 mfd	9000002 mfd	1201 mfd
13. 390 mmfd	14. 420 mmfd	15. 20,000 ohms	16. 50,000 ohms

17.	50,000 ohms
18.	15 mmfd
19.	.1 mfd
20.	1 megohm
21.	1500 ohms
22.	250 ohms
25.	50 mmfd
24.	1 meg
25.	.05 mfd
26.	25 mfd
27.	.5 meg ohms
28.	250 mmfd

29. 250 mmfd 30. 25000 ohms 31. 25000 ohms 32. .5 megohm VC 33. .01 mfd 34. 5000 ohms

38. .01 mfd 34. 5000 ohms 35. .05 mfd 36. 10,000 ohms 37. .004 mfd

38. 8 mfd 39. 12 mfd 40. 100 ohms 41. 25 mfd Cl - aer. section

gang C2 - R.F. section Gang

C3 - Osoillator section gang

Tl - SW aer. air trimmer

T2 - BC aer. air trimmer

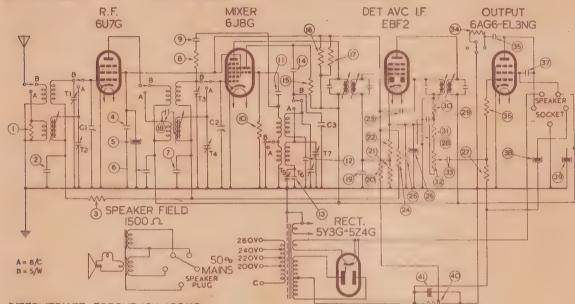
TS - SW RF air trimmer

T4 - BC RF air trimmer

T5 - Padder air trimmer

T6 - S.W. Oscillator air trimmer

T7 - B.C. oscillator air trimmer



INTERMEDIATE FREQUENCY 458KC

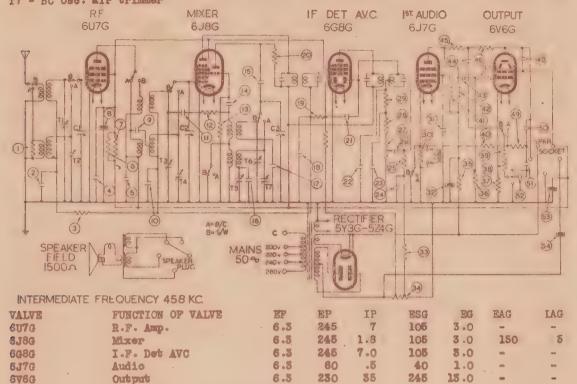
	-								
VALVE	4	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
617G		R.F. Amp.	6.3	250	7	105	3.0	-	1001
6J8G		Mixer	6.3	250	1.8	105	3.0	150	5
EBF2		I.F. Det. AVC	6.3	250	5.5	105	1.75	-	ew .
ELSN		Output	6.3	235	32	250	6.0	-	-
5Y3G		Rectifier	5.0	-	7 - 100		-	- ,	-

TASMA 730

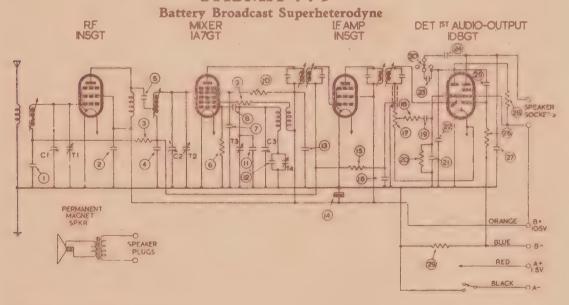
A.C. Operated Dual Wave Superheterodyne

1Ol megohm	15. 420 mmfd	29. 25,000 ohms	4301 mfd
205 mfd	16. 390 mmfd	30. 100 ohms	44. 420 mmfd
31 megohm	1701 mfd	311 mfd	45. 1 megohm
41 mfd	18. 1 mfd	32. 8 mfd	46. 3 megohm
51 mfd	19. 1 megohm	. 335 megohm	47. 10,000 ohms
6. 40.000 ohms	20. 20,000 ohms	34. 100 ohms	4801 mfd
7. 40.000 ohms	21. 50 mmfd	3505 meg ohm	49. 20,000 ohms
8. 12 mfd	22. 90 mmfd	365 megohm	505 mfd
9. 15 mmfd	23. 90 mmfd	37. 350 ohms	5105 mfd
1005 mfd	241 mfd	38. 2000 ohms	52. 50 mmfd
11. 2 mmfd	25. 2 megohm	39 .05 mfd	53. 12 mfd
12. 1000 ohms	2601 mfd	40. 5000 ohms	54.8 mfd
13. 50.000 ohms	275 meg.V.C.	41. 2.5 megohm	Cl - Aer section gang
14. 50 mmfd	28. 25000 ohms	42. 5 megohm	C2 - R.F. " "

C3 - Oso. Section Gang T1 - SW Aer Air trim. T2 - BC Arr Air trim. T3 - SW R.F. air T4 - BC RF air trimmer T5 - Pad Air trimmer T6 - SW (50. " " trimmer T7 - BC Oso. air trimmer



TASMA 775



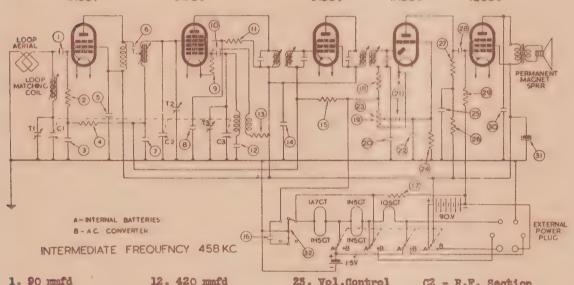
INTERMEDIATE FREQUENCY 458KC

Rectifier

5Y8G

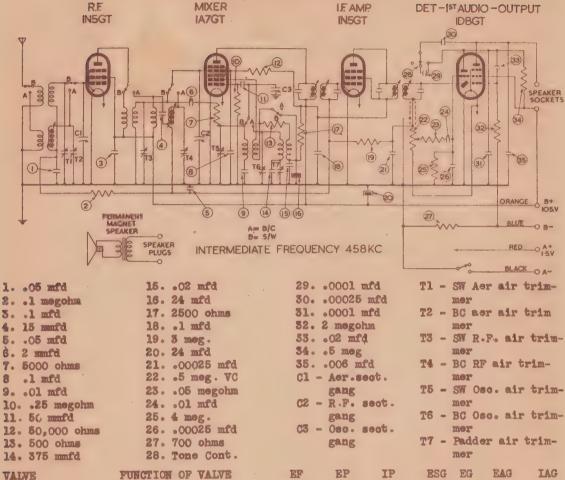
105 mfd	12. 375 mmfd		2300	ol mfd		C3	- Oscill	ator Sec-
21 mfd	131 mfd		2400	025 mfd			tion g	ang
51 megohm	14. 24 mfd		2502	mfd		T1 ·	- Aer ai:	r trim-
405 mfd	15. 3 megohm		26. 2 m	agohm			mer	
5. 15 mmfd	1600025 mfd		2700	~			- R.F. a	ie teim-
						2.0		11 01 7111
625 megohm	175 meg. V.C		285 1	-		F11.00	mer	
71 mfd	18 .05 megohm		29. 700		_	13	- Osoill	
8. 50 mmfd	1901 mfd		30. Ton	o Contr	ol		trimme	
9. 2000 ohms	20. 4 megohm		Cl - Ao	r. soot	ion	T4	- Padder	air trim-
10. 50000 ohms	2100025 mfd		gai	ag .			mer	
11. 15 mmfd	22 .0001 mfd		C2 - RF	Seo .ga	ng			
VALVE	FUNCTION OF VALVE	BF	EP	IP	ESG	EG	EAG	IAG
insg	R.F. Amp	1.5	105	1.25	105		-	-
LA7G	Mixer	1.5	105	0.8	105	-	100	1.5
INSG	I.F. Amp.	1.5	105	1.25	105	-		an .
1D8GT	Det. AVC Audio		30	0.15				
	output	1.8	100	5.5	105	9.0	_	con
	T	X C	KIX	777				
		A)	MA					

Portable Battery Superheterodyne or with A.C. Broadcast Converter Unit
RFAMP
INSGT
MIXER
IFAMP
INSGT
INSGT
INSGT
INSGT
INSGT
INSGT
INSGT
INSGT



To an annual of	THE A SIMO WHITE A		DO: 107	· · Ooll of O	b	Co - Kok	· badafol	1
2. 1 megohm	13. 500 ohms		24. 4 m	egohm			gang	
305 mfd	141 mfd		251	mfd		C3 - Oso:	illator a	
4l megohm	15. 3 megohm		261	megohm		gan		
505 mfd	16002 mfd		271	megohm		Tl - Aer		
6. 15 mmfd	17. 750 ohms		2801	100			rimmer	
705 mfd	1805 megohm		29. 2 m	egohm			air tri	700
805 mfd	195 megohm		3000	6 mfd		mer		
925 megohm	20. 250 mmfd		31. 24	mfd			llator a	dr
10. 50 mmfd	2101 mfd		32. On-	Off & To			rimmer	
11. 50,000 ohms	22. 250 mmfd			. 500 - gar				
VALVE	FUNCTION OF VALVE	EF	EP	IP	ESG	EG	EAG	IAG
INSGT	R.F. Amp.	1.5	83	1	83			
						-	-	-
la7gr	Mixer	1.5	83	-4	40	-	80	1
INSGT	I.F. Amp.	1.5	83	1 -	83	40	_	_
1H5GT	Det AVC Audio	1.5	35	-025	en 1	40		
1Q5GT	Output	1.5	80	8.8	85	7	-	_

Battery Dual Wave Superheterodyne



1N5G R.F. Amp.
1A7G Mixer
1N5G I.F. Amp.
1D8GT Det.AVC audio output
Output

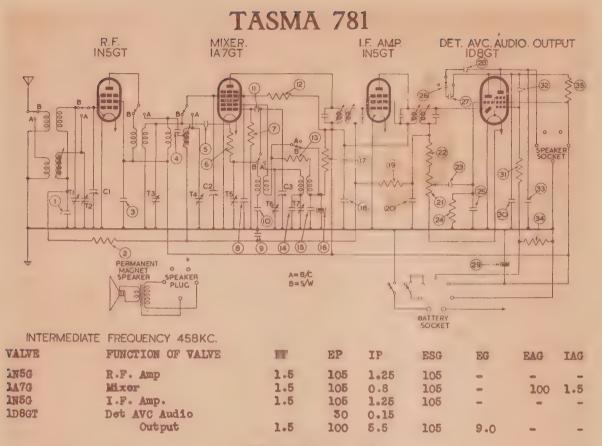
IP EF EP 1.5 105 1.25 1.5 105 0.8 1.25 1.5 105 30 0.15 100 5.5

ESG EG EAG IAG 105 - 100 1.5 105 - - -

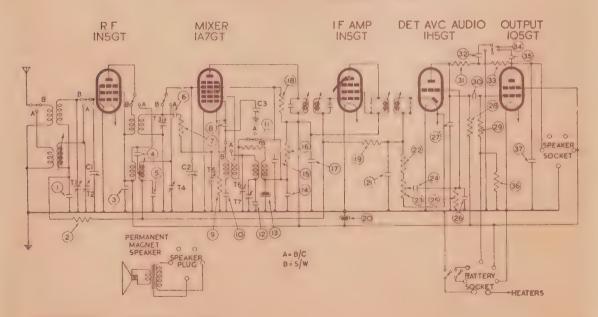
TASMA 781

Battery Dual Wave Superheterodyne

105 mfd	14. 390 mmfd	27. 100 mmfd	T2 -	B.C. aer air
21 megohm	1502 mfd	28. 250 mmfd ·		trimmer
S1 mfd	16. 24 mfd	29. 24 mfd	T3 -	SW R.F. air
4. 15 mmfd	17: 2500 ohms	30. 100 mmfd		trimmer
5. 2 mmfd	181 mfd	31. 2 megohm	T4 -	BC RF air trim-
6. 1000 ohms	19. 3 megohm	3202 mfd		mer
725 megohm	20. 250 mfd	33006 mfd	T5 -	SW Oso. air
81 mfd	215 meg.VC	34. 700 ohms		trimmer
905 mfd	2205 megohm	355 megohm	T6 -	BC Osc. air
10. oll mfd	2301 mfd	Cl -Aer.Sect.gang		trimmer
11. 50 mmfd	24. 4 megohm	C2 - RF " "	T7 -	Padder air
12. 50,000 ohms	25. 250 mmfd	C3 - Osc. " "		trimmer
13. 500 ohms	26. Tone Cont.	Tl-SW aer air trim.		



Battery Dual Wave Superheterodyne



INTERMEDIATE FREQUENCY 458KC

TASMA 786 (Continued)

						,				
105 mfd	15	1 mfd		29.	2 megoh	m	T	1 - 8	W aer	air
21 megohm	16. 2	500 ohms		30.	.02 mfd				trimm	er
31 mfd	17. 1	mfd		31.	5 megoh	111	T	2 - E	c aer	air
4. 15 mmfd	18. 5	0,000 ohms		32.	420 mmf	d		t	rimmer	
505 mfd	19 3	meg.		33.	1.5 meg	ohm	T	3 - 8	W RF a	ir
6. 2 mmfd	20. 2	4 mfd		34.	Tone Co	nt.			trimm	er
7. 1000 ohms	21. 2	50 mmfd		35.	.01 mfd		T	4 - E	C RF a	ir
8. 50 mmfd	22	05 megohm		36.	350 ohu	8		t	rimmer	
925 megohm	23	5 meg.V.C.		37.	.006 mf	d	T	5 - 8	W 080.	air
1001 mfd	24	Ol mfd		Cl -	Aer.Se	ot.gang		t	rimmer	
11. 500 ohms	25. 4	megohm		C2 -	RF sec	tion	T	6 - E	C oso.	air
12. 390 mfd	26. 2	50 mmfd ·			gang	4		t	rimmer	
13. 24 mfd	27. 1	00 mmfd		C3 -	Oscill	ator	T	7 - E	adder	air
1402 mfd	28. •	5 megohm		٠	sectio	n gang		t	rimmer	
VALVE	FUNCTION OF V	ALVE	EF	EP	IP	ESG	EG	EA	.G	IAG
INGO	R.F Amp.		1.5	105	1.25	105	-	-	•	
la7G	Mixer		1.5	105	0.8	105	cm .	3	100	1.5
IN 5G	I.F. Amp.		1.5	105	1.25	105	-	-		-
1H5G	Det AVC Audio		1.5	35	0.1	600	egh.	-	p	-
1Q5G	Output		1.5	100	8.0	105	5.5	rior		-

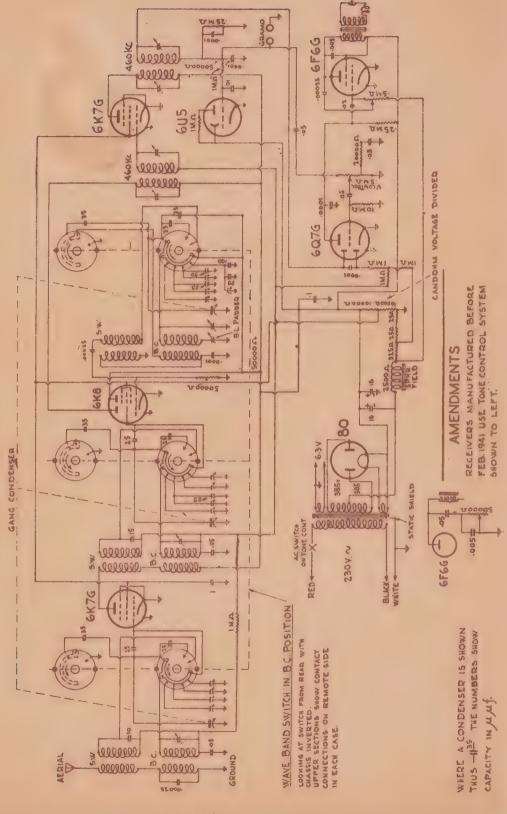
MEMORANDA

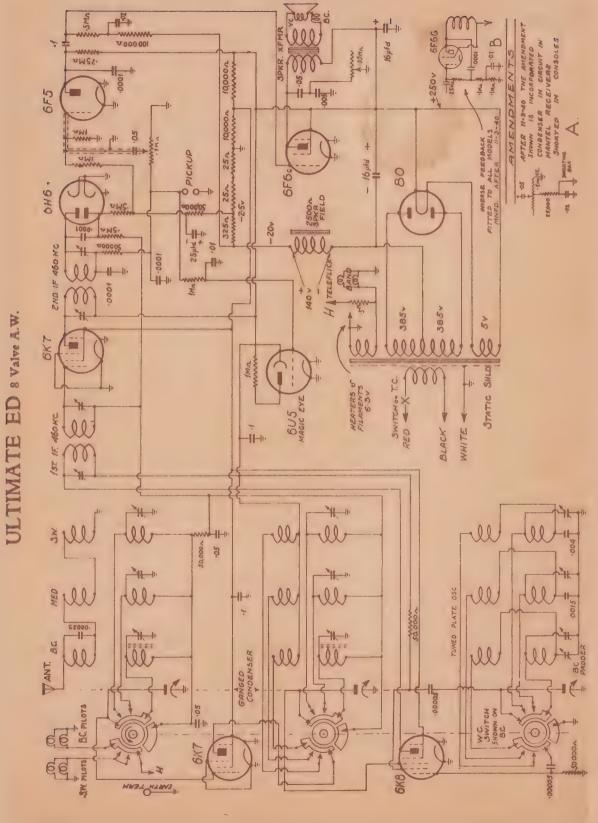
MEMORANDA

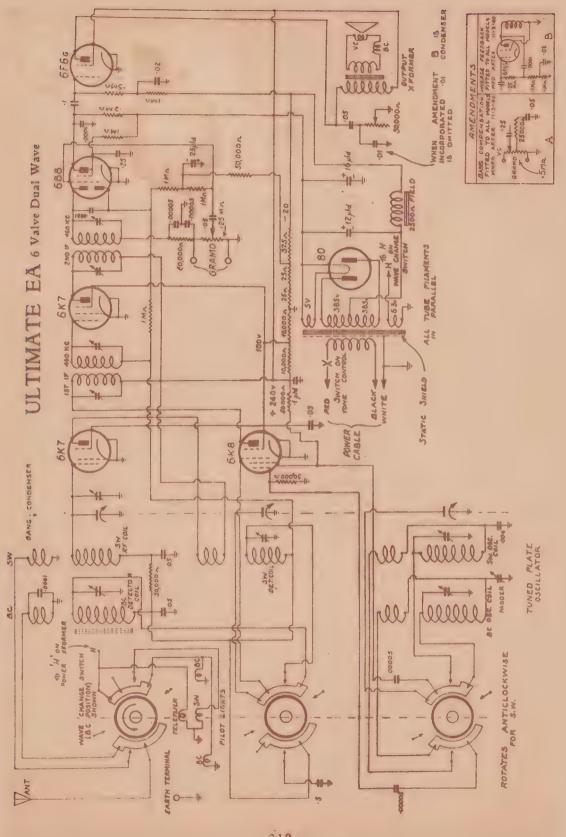
ULTIMATE RADIO

Sole Australian Concessionaires: Geo. Brown & Co. Pty. Ltd., 267 Clarence St., Sydney, N.S.W.

ULTIMATE FA 7 Valve Bandspread

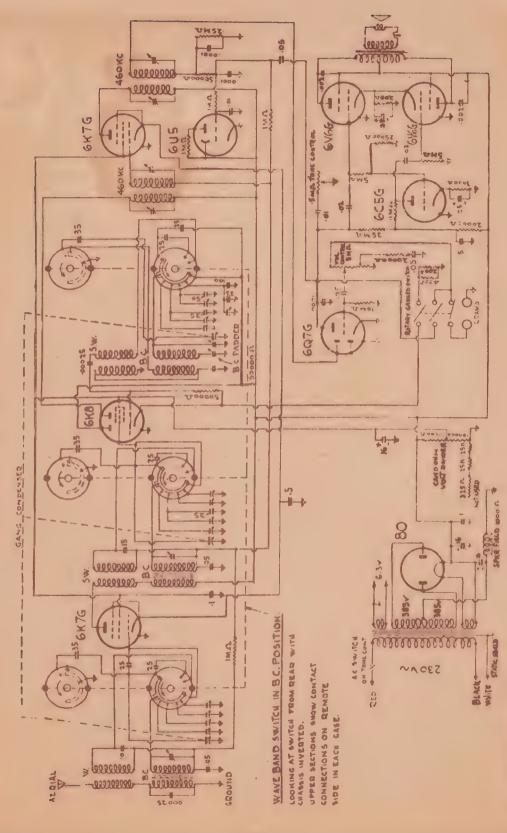




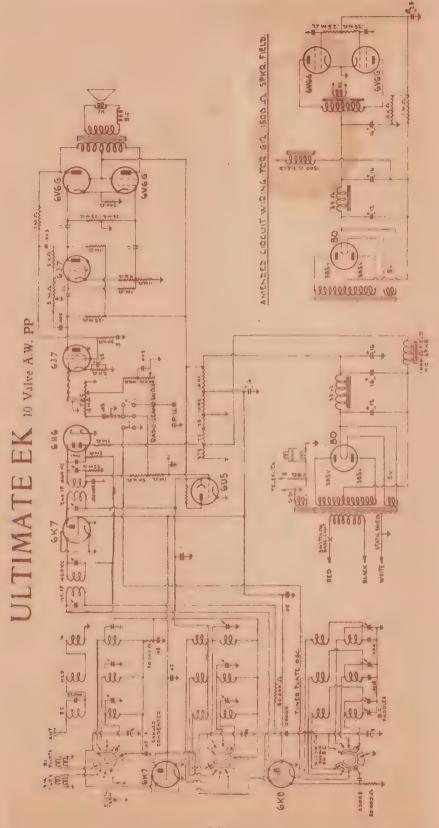


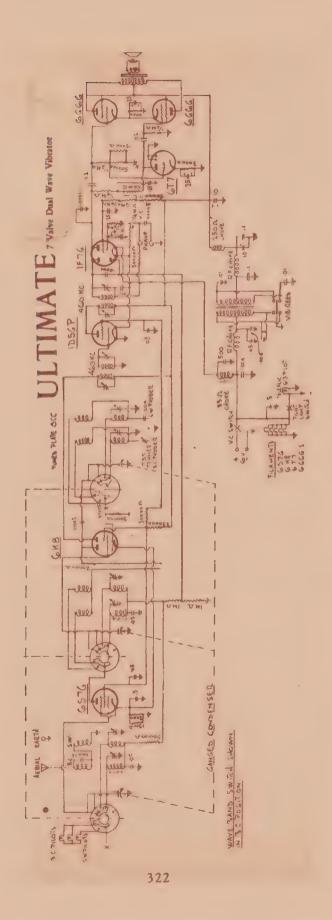
1111 T-01 CHOKE SPAR XF 10000-+ 1407 10. HH, -02 1FTG HH RF CHOKE 500ptd 150. TH: 45 ULTIMATE EF 5 Valve Dual Wave Vibrator -000 59,000 VOL CONT. ġ HH SIMEG 6 10173 50,000 \$ 25000 20,000 5000005 The TUNED PLATE OSCILLATOR ** P 1 M \mathfrak{M} M M 50000 TANT. CONDENSER 30 S S BC PILOTS .05 0276 E O III

319



WHERE A CONDENSER IS SHOWN THUS — 13 TE NUMBERS SHOW CAPACITY IN ALL

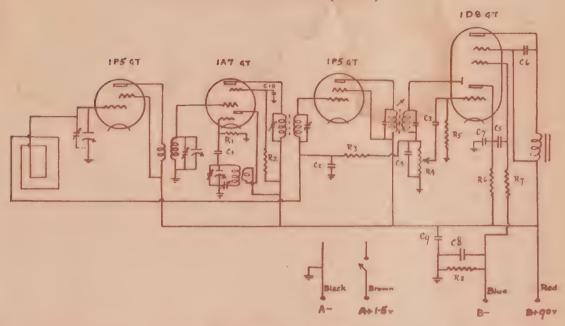




WELDON RADIO

Manufactured by Bloch & Gerber Ltd., with which is associated Weldon Electric Supply Co., 46-48 York Street, Sydney, N.S.W.

WELDON C423P (1940)



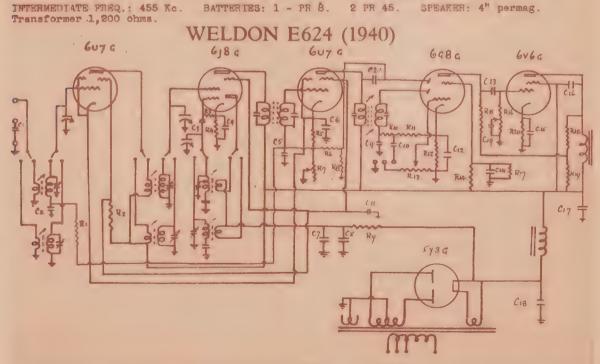
01 - .0001 mf mica 02 - .05 mf paper 03 - .005 mf paper 04 - .0001 mf mica

C5 - .005 mf paper C6 - .005 mf paper C7 - .0001 mf mica C8 - 10mf tub. elec.

C9 - .25mf paper BATTERIES: 1 - PR 8.

C10- .1 mf R1 - .05 meg. R2 - .05 meg. R3 - 2 meg. R4 - .5 meg. pot. R5 - 3 megohm R6 - .5 megohm
R7 - 1.5 megohm R8 - 1,200 ohms

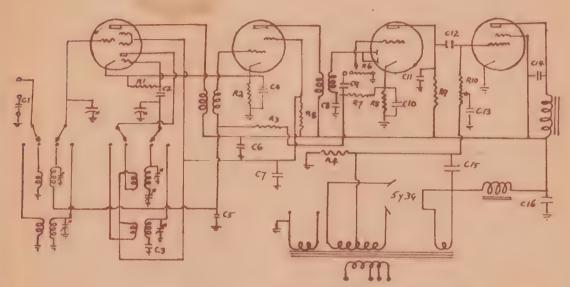
2 PR 45. SPEAKER: 4" permag.



WELDON E624 (Continued)

C41 mf	C111 mf C12- 25 mf C1305 mf C141 mf C15- 25 mf	R11 meg. R203 meg. R305 meg. R4 - 250 ohms R5 - 150 ohms	R115 meg. R12- 2500 ohm R135 meg.pot. R14- 1 meg.
C505 mf C65 mf C71 mf C8 - 8 mf 500V	C16002 mf C17- 8 mf 500V C18- 16mf 500V	R6 - 1 megohm R7 - 2500 ohm pot. R85 meg.	R1525 megohm R165 meg. pot. R1725 meg. R181 meg.
C90001 mf C1005 mf INTERMEDIATE FREQUENCY:	C19005 mf C2000005mf 455 Kc.		R1901 meg. R20- 250 ohms Transformer -5000 ohm.

WELDON E524 (1940)



C2 = C3 = C4 = C5 = C6 = C6	.0005 mf mica .0005 mf mica .005 mf mica .5 mf paper .05 mf paper .1 mf paper	C9 - C10- C11- C12- C13-	.00025 mica .01 paper 25mf elec.tub00025 mf mica .01 mf paper .006 mf paper	R1 - R2 - R3	8mf 500V 8mf 500V elect. .05 meg. 150 ohms 1 megohm 350 ohms	R6 R7 R8 R9 R10		.5 megohm .5meg. pot. .5 megohm 5000 ohms .25 megohm .5 meg. potent.
-----------------------------	--	--------------------------------------	---	--	--	-----------------------------	--	--

INTERMEDIATE FREQUENCY - 455 Kc.

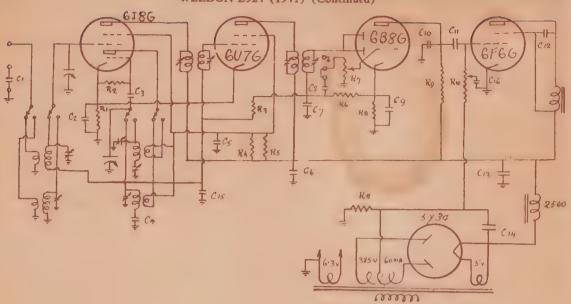
WELDON E524 (1941)

5 Valve A.C. Dual Wave

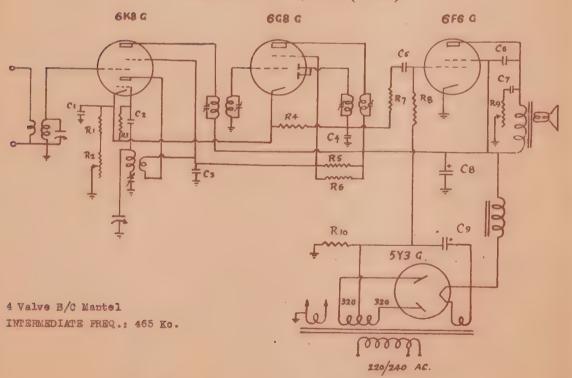
CONDENSERS RESISTORS Cl - .0005mf mica Clo- .000lmf mica R1 - 300 ohm Wire R8 - 5000 ohms C2 - .5mf paper Cll- .Olmf paper Wound Wire Wound C3 - .00005 mica C12- .005mf paper R2 - .05meg. 1 Watt R9 - .25 meg. 1 C4 - .005 mica Cl3- amf 500V elect. R3 - 1 meg. 1 Watt Watt C5 - .lmf paper C14- 8mf 500V elect. R4 - 30,000 1 Watt Rlo- .5 meg. potentiometer C6 - .lmf paper C15- .05mf paper R5 - 30,000 1 Watt C7 - .00025 mica R6 - .5 meg. 1 Watt Rll- 350 ohm Wire C16- .005mf paper C8 - .Olmf paper C9 - 25mf electro R7 - .5 meg. pot-Wound entiometer

13 to 42 metres - 550 to 1600 K.C. INTERMEDIATE FREQUENCY: 455 Kc.

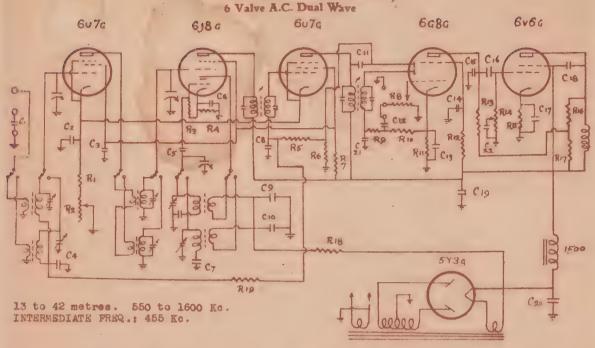
WELDON E524 (1941) (Continued)



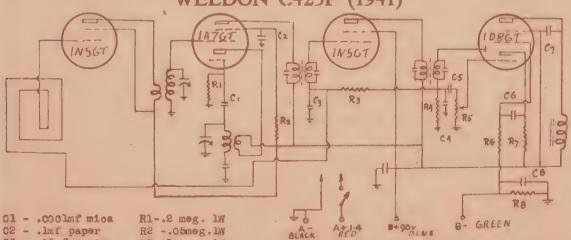
WELDON 143M (1941)



WELDON E624 (1941)



Cl2- .05mf paper Cl - .0005mf mica R1 - 150 ohm W/W R12- 1.5 mag. 1 Watt Cl3- 25mf elect. R2 - 5000 ohm pot.W/W C2 - .05mf paper R13- .25 meg. 1 Watt C3 - .lmf paper Cl4- .lmf paper R3 - .05 meg. 1 Watt R14- .5 meg. potent-C4 - .05mf paper Cl5- .000lmf mice R4 - 250 ohm W/W Cl6- .05mf paper C5 - .00005mf mica R5 - 1 meg. 1 Watt R15- 250 ohm W/W C17- 25mf elect. C6 - .lmf paper R6 - .5 meg. 1 Watt R16- .1 meg. 1 Watt C18- .002mf mica C19- 16mf 500V elec. C20- 16mf 500V elec. C7 - .005mf mica R7 - 30000 ohm 1 Watt R17- 10.000 ohm 1 W G9 - .05mf paper G9 - .lmf paper R8 - .5 meg. pot. R18= 30000 ohm 1W R9 - .05meg. 1 Watt R10- .5 meg. 1 Watt R19- .1 meg. 1 Watt Clo- amf 500V elect. C21- .000lmf mica C22- .005mf paper Cll- .00005mf mica R11- 2500 ohm W/W



C2 - .lmf paper C3 - .O5mf paper R3 -2 meg. lW R4 -1 meg.lWatt R5 -.5 meg.pot. C4 - .000lmf mica C5,6 & 7-.005mf pap. C8 - 10mf electro. R6 -3 meg. 1W R8 - 1200 ohm W/W R7 -.5 meg. lW

4 Valve Portable broadcast only 1.4V Valves. Batteries - 1- PR8 & 2-PR45 INTERMEDIATE FREQ .: 455 Kc.

iometer

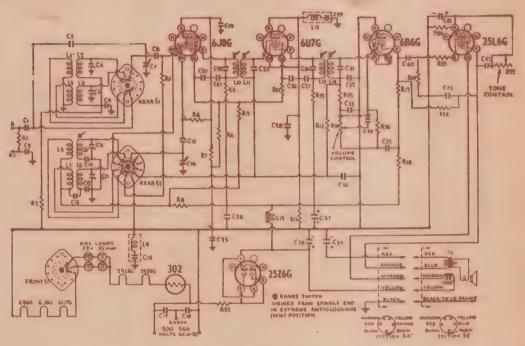
WESTINGHOUSE RADIO

Manufactured by Westinghouse Rosebery Pty. Ltd., Waterloo. N.S.W

WESTINGHOUSE 890 & 1890

5 Valve, Two Band, Universal A.C-D.C. Operated Superheterodynes.

TUNING RANGES: "Standard Medium Wave" — 1600-550 K.C. "Short Wave" — 13.65-45M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" — 600 K.C. (Osc.), 1500 R.C. (Osc. and Aer.). "Short Wave" — 15M (Osc. and Aer.). INTERMEDIATE FREQ.: 455 K.C. POWER CONSUMPTION: 90 watts. VALVE COMPLEMENT: (1) 6J8G Freq. Converter. (2) 6U7G I.F. Amp. (3) 6B6G 2nd Det., A.V.C. and A.F. Amp. (4) 25L6G Output. (5) 25A6G Rectifier. 302-Barretter. LOUDSPEAKER: 7" and 12". Field Coil Resistance 2500 ohms. UNDISTORTED POWER OUTPUT: 2.2watts. MAINS FUSES: 3 amp.



Code No. L1, L2 L3, L4 L5, L6 L7, L8 L9, C14 L10, L11 L12, C29 L13, L14 L15	COILS. Aerial Coil 1600.550 K.C. Aerial Coil 13.65.45 M. Osc. Coil 1600.550 K.C. Osc. Coil 13.65.45 M. Filter Unit 1st l.F. Transformer Filter Unit 2nd l.F. Transformer Filter Choke	R12 600 ohms 1/3W R13 1.75 megohms 1/3W R14 500,000 ohms Vol. Cont. R15 50.000 ohms 1/3W R16 10 megohms 1W R17 200,000 ohms 1W R18 50,000 ohms 1W R19 390,000 ohms 1/3W R20 150 ohms 3W R21 50,000 ohms 1/3W R22 100,000 ohms 1/3W R22 100,000 ohms 1/3W R23 100,000 ohms 1/3W	C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27	Tuning Condenser .! mfd paper .! mfd paper .02 mfd paper .! mfd paper .! mfd paper .! mfd paper .! mfd mica (N) .! mfd paper
T1 T1 Code No. R1 R2 R3 R4 R5 R6 R7	TRANSFORMERS Loudspeaker Transformer (Mantel) Loudspeaker Transformer (Console) RESISTORS. 100,000 ohms 1/3W 400 ohms 1/3W 500,000 ohms 1/3W 600 ohms 1/3W	Code No. CONDENSERS. C1 500 mmfd mica C2 500 mmfd mica C3 4 mmfd mica C4 2-20 mmfd air trimmer C5 2-20 mmfd air trimmer C6 0.2 mfd paper C7 Tuning Condenser C8 350 mmfd mica C9 11-29 mmfd air trimmer C10 440 mmfd mica (padder) C11 2-10 mmfd air trimmer C12 4000 mmfd mica (padder)	C27 C28 C29 C30 C31 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41	.1 mfd paper .01 mfd paper 3500 mmfd mica 70 mmfd mica (N) 70 mmfd mica (N) 110 mmfd mica (L) 110 mmfd mica (L) .01 mfd paper .5 mfd paper .05 mfd paper .05 mfd paper .05 mfd paper .05 mfd paper .016 mfd, 525 P.V. Electro .01 mfd paper .01 mfd 525 P.V. Electro
R9 R10 R11	8000 ohms 1W 600 ohms 1/3W 600 ohms 1/3W	C13 .05 mfd paper C14 3500 mmfd mica C15 70 mmfd mica (N)	C42 C43	.1 mfd paper .0025 mfd paper—R189 .035 mfd—R89

WESTINGHOUSE 890 & 1890 (Continued)

SOCKET VOLTAGES

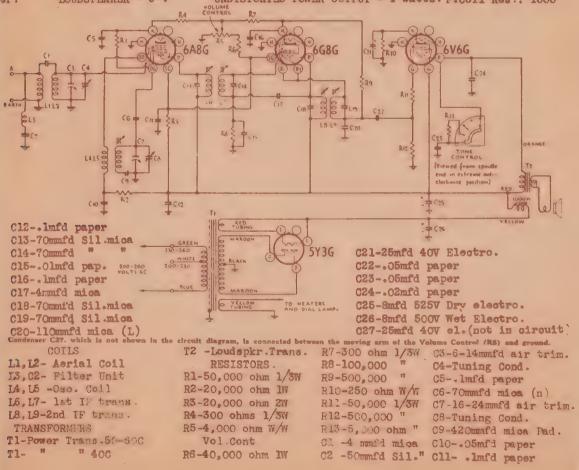
VALVE 6J8G Converter	CATHODE TO NEGATIVE VOLTS	SCREEN GRID TO NEGATIVE VOLTS	PLATE TO NEGATIVE VOLTS	PLATE CURRENT M.A.	HEATER VOLTS
M.W.	2.5	100	205	1.0	6.3
S.W.	2.5	100	205	1.5	-
Oscillator					
M.W.	-	•	150	4.0	**
S.W.	-	=	150	4.0	-
6U7G I.F. Amp.	. 3.5	80	205	4.5	6.3
6B6G 2nd Det.	0	-	120	0.35	6.3
25L6G Output	7.0	105	85 *	38	25.0
2526G Rectifier	250	m	235		25.0

Voltage across loudspeaker field - 120 volts. # Cannot be measured with ordinary voltmeter. Measured at 240 volts D.C. No signal. All controls maximum clockwise.

WESTINGHOUSE 920

4 Valve, One Band, A.C. Operated Superheterodyne

TUNING RANGE: 1600-550 Kc/s. R.F. ALIGNMENT SETTINGS: 600 Kc/s. (L.F. Osc.), 1500 Kc. (H.F. Osc. and Aer.) INTERMEDIATE FREQ.- 455 Kc/s. POWER CONSUMPTION - 60 watts. VALVE COMPLEMENT- 6A8G Converter. 6G8G I.F. Amp. and 2nd Det. 6V6G Output. 5Y3G Rectifier. LOUDSPEAKER - 5". UNDISTORTED POWER OUTPUT - 4 watts. F.Coil Res.: 1000



WESTINGHOUSE 920 (Continued)

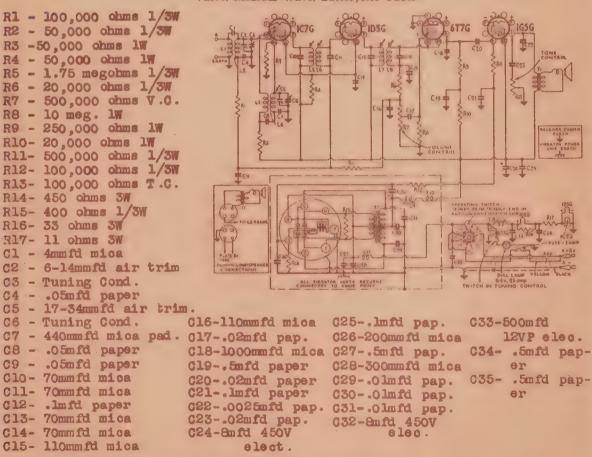
SOCKET VOLTAGES

		CATHODE TO	SCREEN GRID	PLATE TO	PLATE	FILAMENT
		CHASSIS	TO CHASSIS	CHASSIS	CURRENT	VOLTS
VALVE		VOLES	VOLTS	VOLTS	M.A.	
6A8G	Convert.	2.7	95	250	3.0	6.3
	Osc.		400	160	4.0	1 1 -
6686	I.F. Amp	•				
	2nd Det.		95	250	7.0	6.3
6V 6G	Output	11.0	250	230	40	6.3
5Y30	Rectifies	r 640/320	volts, 60 M.A	. Total ou	rrent 5.0	
Voltage	across		field - 60 v			volts A.C.

supply. No signal input. Volume control at maximum clockwise.

WESTINGHOUSE 830

4 Valve, Medium Wave, Batteryless Table



TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" - 600 K.C. (Osc.), 1500 K.C. (Osc.&Aer). INTERMEDIATE FREQUENCY: 460 K.C. CURRENT CONSUMPTION: 1.25 amps. VALVE COMPLEMENT: 1076 Converter. 1D5G I.F. Amp. 6T7G 2nd Det., A.V.C. & A.F. Amp. 1656 Output Pentode. LOUDSPEAKER: (Permanent Magnet). UNDISTORTED POWER OUTPUT: 550 milli-

watts.

	GRID TO CHASSIS	SCREEN GRID TO CHASSIS	PLATE	PLATE	POSITIVE (+) FILAMENT
VALVE	VOLTS	VOLTS	VOLTS	CURRENT M.A.	VOLTS TO
107G Detector	0	40	140	1.0	CHA9818 2.0
Osc.	=	₩ .4 4	60	1.5	-
1D5G I.F. Amp.	0	40	140	2.0	2.0
6T7G 2nd Det.	0	- 19	50*	.5	6.0
105G Pentode	-13*	140	1.35	10.0	6.0

Cannot be measured with ordinary voltmeter. Measured with no signal input. Volume Control at maximum clockwise:

WESTINGHOUSE 1860

5 Valve, World Range, Battery Operated

TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. "Short wave" - 1f 50M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" 600 Kc.(Osc.) 1 00 Kc. (Osc. R.F. Aer). "Short Wave" 18M. (Osc., R.F., Aer.).

INTERMEDIATE FREQ.: 460 Kc.

CURRENT CONSUMPTION. "B" BATTERY OPERATION VIBRATOR OPERATION

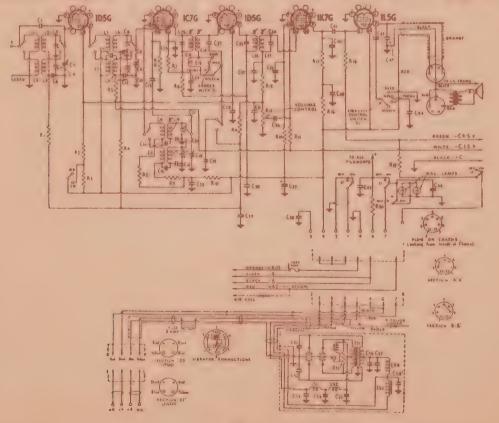
'A" Battery at 2 volts 0.60 amp.

"A" Battery at 2 volts
"A" Battery at 6 volts
"B" Battery at 135 volts

17 M.A.

1.2 amps.
(Supplied from Vibrator Power Unit)

VALVE COMPLEMENT: 1D5G R.F. Amp. 1C7G Freq.Convt. 1D5G I.F. Amp. 1K7G - 2nd Det. A.V.C. and A.F. Amp. 1L5G Output Pentode UNDISTORTED POWER OUTPUT - 350 milliwatts. LOUDSPKR.: (Perm. Magnet).



WESTINGHOUSE 1860 (Continued)

		Property and the second
R1 -100,000 ohm 1/3W	C5 - Tuning Cond.	C31-110mmfd mica
R2 - 70,000 ohm 1W	C605mfd paper	C32- llommfd mica
R3 - 50,000 ohm lW	C7 - 4mmfd mica	C33- 70mmfd mica
R4 - 100,000 ohm 1/3W	C8 - 2-lommfd air trim	C34- 70mmfd mica
R5 -100,000 ohm 1/3W	C9O5mfd paper	C35lmfd paper
R6 - 60,000 ohm 1/3W	Clo- 2-10mmfd air trim	03602mfd paper
R7 - 40,000 ohm lW	Cll- Tuning Cond.	037- 8mfd 450V elec.
R8 - 300 ohm 1/3W	Cl205mfd paper	C38- 450mmfd mica
R9 - 400 ohm 1/3W	Cl3- llommfd mica	C395mfd paper
R10- 6,500 ohm lW	Cl405mfd paper	C40- llommfd mica
R11- 1.75 meg.1/3W	Cl505mfd paper	C4105mfd paper
R12- 60,000 ohm 1/3W	Cl6- 3500mmfd mica pad	C42Olmfd paper
R13-500,000 ohm V.C.	C17- 2-10mmfd air trim	C430025mfd paper
R14- 1 meg. 1W	C18- Tuning cond.	C44005mfd paper
R15- 1.75 meg. 1/3W	C19- Deleted	C45- Deleted
R16- 50,000 obm 1W	C20- 420mmfd mica pad	C46- 450mmfd mica
R17- 200,000 ohm 1W	C21- 11-29mmfd air trim	0475mfd paper
R18- 500,000 ohm 1/3W	C22-Deleted	C51Olmfd paper
R19- 600 ohm 1W	C23- 8mfd 450V elec.	C52Olmfd paper
R20- 4.5 ohm W/Wnd	C24lmfd paper	C53lmfd paper
R21- 40,000 ohm 1W	C25lmfd paper	C5425mfd paper
R51- 400 ohm 1/3W	C26- 70mmfd mica	C5525mfd paper
Cl - 4mmfd mica	C27- 70mmfd mica	C56- 8mfd 450V elec
02 - 2-20mmfd air trim.		C5702mfd paper
C3 - Deleted	C28lmfd paper C2905mfd paper	C585mfd paper
C4 - 2-20mmfd air trim.	C30lmfd paper	papor

	CONTROL	SCREEN	PLATE .			
	GRID TO	GRID TO	TO	PLATE		
	CHASSIS	CHASSIS	CHASSIS	CURRENT	FILAMENT	
VALVE	VOLTS	VOLTS	VOLES	M.A.	VOLTS	
1D5G R.F. Ampl.						
M	.W. 0	37	135	1.5	2.0	
3	.W. O	40	135	1.8		
1076 Detector M	.W. 0	55	135	2.4	2.0	
	.W1.5年	55	135	3.2		
Oscillator M	.W	-	72	1.4		
3	.W	_	110	4.0	ESPAN .	
1D5G I.F. Amp.M	.W. 1.5	37	135	1.1	2.0	
	W. 0	40	135	2.0		
1K7G Reflex Amp	1.5*	42*	69.5*	.22	2.0	
1L5G Pentode	-4.5*	135	131	5.5	2.0	

* Cannot be measured with ordinary voltmeter. Measured with volume control at maximum. No signal.

WESTINGHOUSE 3090

5 Valve, World Range, A.C. Operated

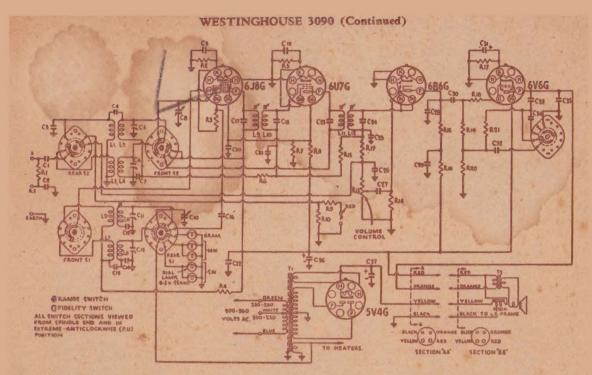
TUNING RANGES: "Standard Medium Wave" - 1600-550 K.C. "Short Wave" 13.6-43M. R.F. ALIGNMENT SETTINGS: "Standard Medium Wave" - 600 K.C.(Osc.), 1500 (Osc. and Aer.) "Short Wave" - 15M. (Osc. and Aer.).

INTERMEDIATE FREQUENCY: 460 K.C. POWER CONSUMPTION: 60 watts.

VALVE COMPLEMENT: 6J8G Freq. Converter. 6U7G I.F. Amp. 6B6G 2nd Det., A.V.C. and A.F. Amp. 6V6G Output. 5V4G Rectifier.

LOUDSPEAKER: 6½-inch Electrodynamic.

UNDISTORTED POWER OUTPUT - 4.25 watts.



R1 - 100,000 ohm 1/3W	R20- 50,000 ohm 1/3W	Cl9lmfti paper
R2 - 400 ohms 1/3W	R21- 250,000 ohm	C20lmfd paper
R3 - 30,000 ohm 1/3W	Cl & C2-500mmfd mica	C21O5mfd paper
R4 - 20,000 ohm 1W	C3 - 50mmfd mica	C22lmfd paper
R5 - 600 ohm 1/3W	C4 - 4mmfd mica	C23- 70mmfd mica
R6 - 100,000 ohm 1/3W	C5 - 2-20mmfd air trim	C24- 70mmfd mica
R7 - 20,000 ohm 2W	C6 - 11-29mmfd air trim	C25- 110mmfd mica
R8 - 20,000 ohm 2W	C705mfd paper	C26- llommfd mica
R9 - 50,000 ohm 1/3W	C8 - Tuning cond.	C27Olmfd paper
R10-20,000 ohm 1/3W	C9lmfd paper	C28- llommfd mica
R11- 1.75 meg. 1/3W	Clo- Tuning cond.	C295mfd paper
R12- 60,000 ohm 1/3W	Cll- 11-29mmfd air trim	C3002mfd paper C31- 25mfd 25V elec.
R13- 500,000 ohm V.C.	Cl2- 420mmfd mica pad.	C31- 25mfd 25V elec.
R14- 10 meg. 1W	Cl3- 2-lommfd air trim	C32- 2000mmfd mica
R15- 200,000 ohm 1W	C14- 3500mmfd mica pad.	C3305mfd paper
R16- 20,000 ohm 1W	C15OSmfd paper	C34- 700mmfd mica
R17- 250,000 ohm 3W	Cl6- 70mmfd mica	C350025mfd paper
R18- 50,000 ohm 1/3W	C17- 70mmfd mica	C36- 8mfd 450V elec.
R19- 390,000 ohm 1/3W	C18- 70mmfd mica	C37- 16mfd 500V elec.

	CATHODE	SCREEN	PLATE TO	PLATE	
A THE STATE OF THE	TO CHASSIS	TO CHASSIS	CHASSIS	CURBENT	HEATER
VALVE	VOLTS	VOLTS	VOLTS	M.A.	VOLTS
6J8G Detector	3.0	100	250	1.0	6.3
Oscillator	-		150	5.5	
6U7G I.F. Amp.	4.0	100	250	5.0	6.3
6B6G 2nd Det .AV				THE PARTY OF THE	
Audio Amp.	-		* 132	0.6	6.3
6V 6G Output	12.0	250	225	4.5	6.3
5V4G Rectifier		volts, 70 M			.0

* cannot be measured with ordinary voltmeter.

